

Program EVALPLOT  
(Version 2017-1)

by

Dermott E. Cullen  
(Present Contact Information)

Dermott E. Cullen  
1466 Hudson Way  
Livermore, CA 94550  
U.S.A.

Tele: 925-443-1911

E.Mail:redcullen1@comcast.net

Web:redcullen1.net/HOMEPAGE.NEW

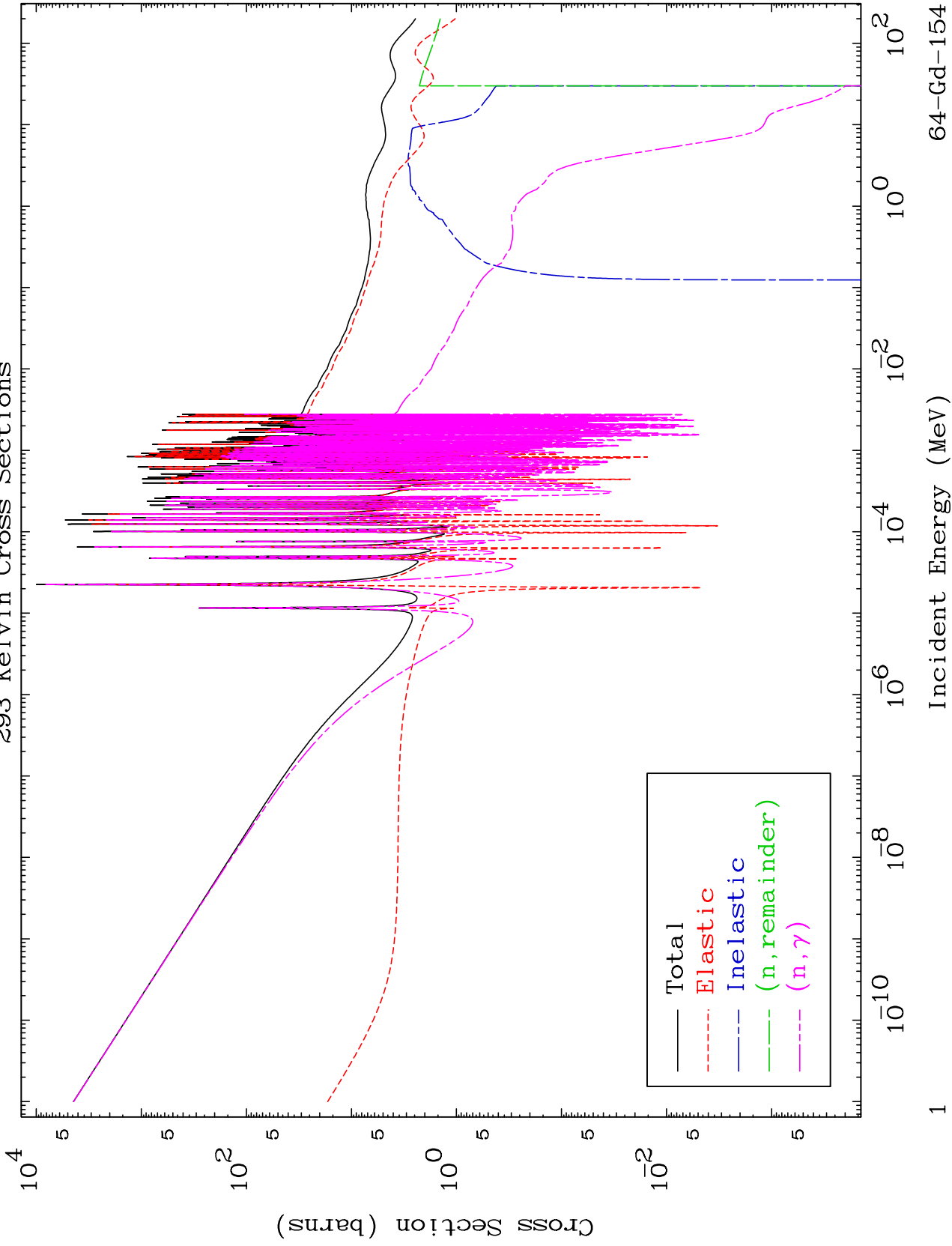
Press Mouse Button to Start

MAT 6431

Major

293 Kelvin Cross Sections

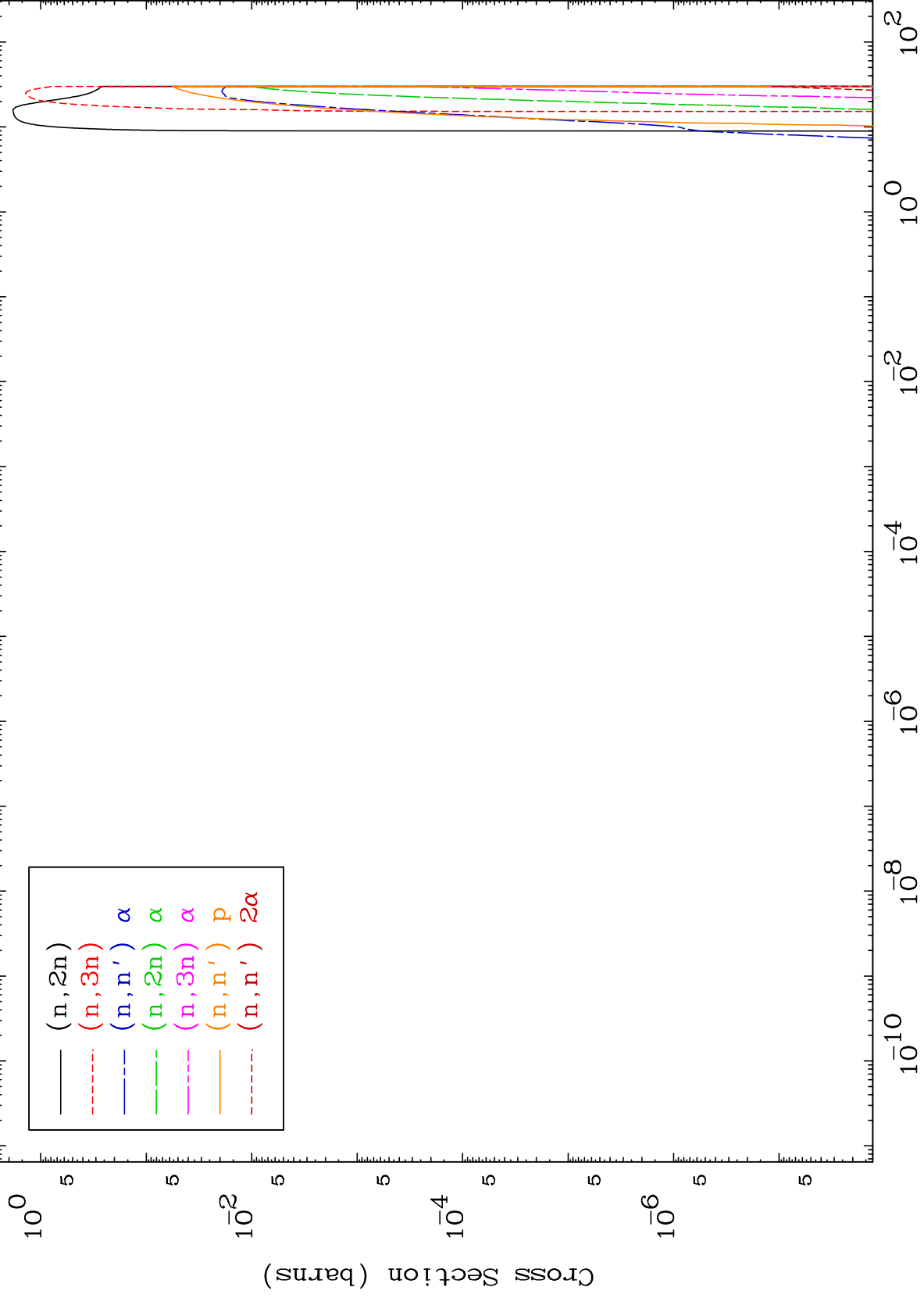
64-Gd-154

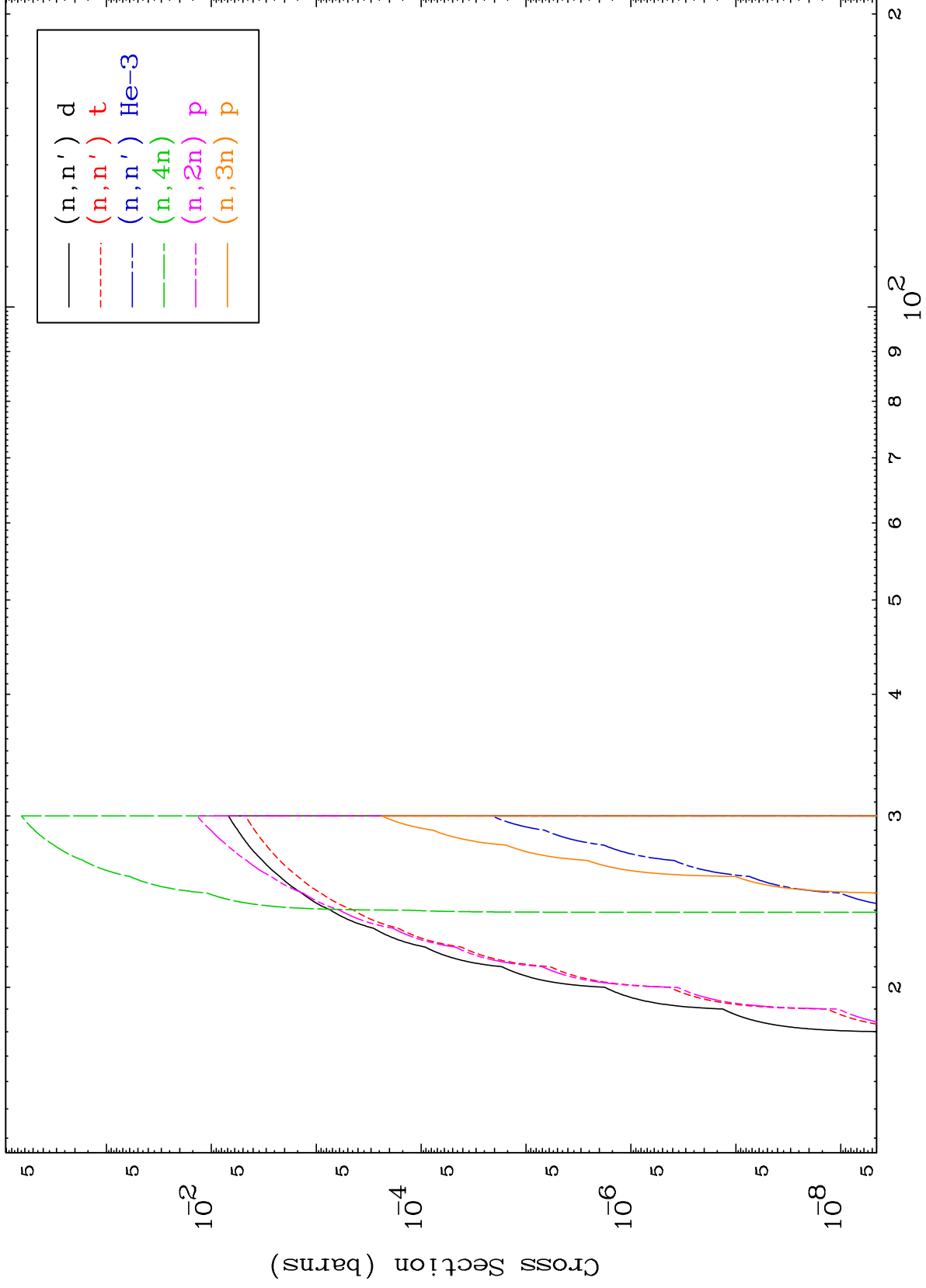


MAT 6431

Neutron Production  
293 Kelvin Cross Sections

64-Gd-154

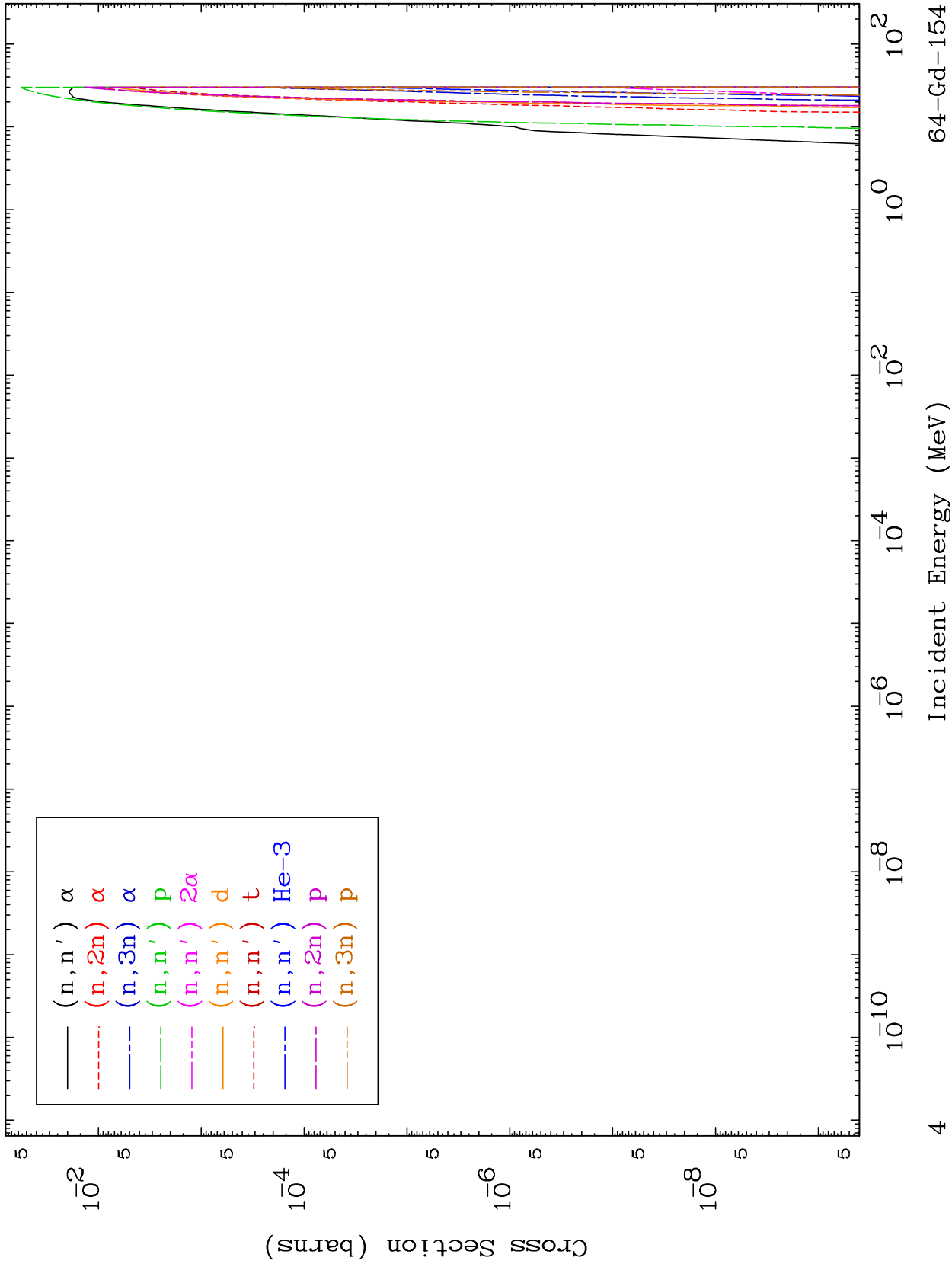




MAT 6431

Charged Particle  
293 Kelvin Cross Sections

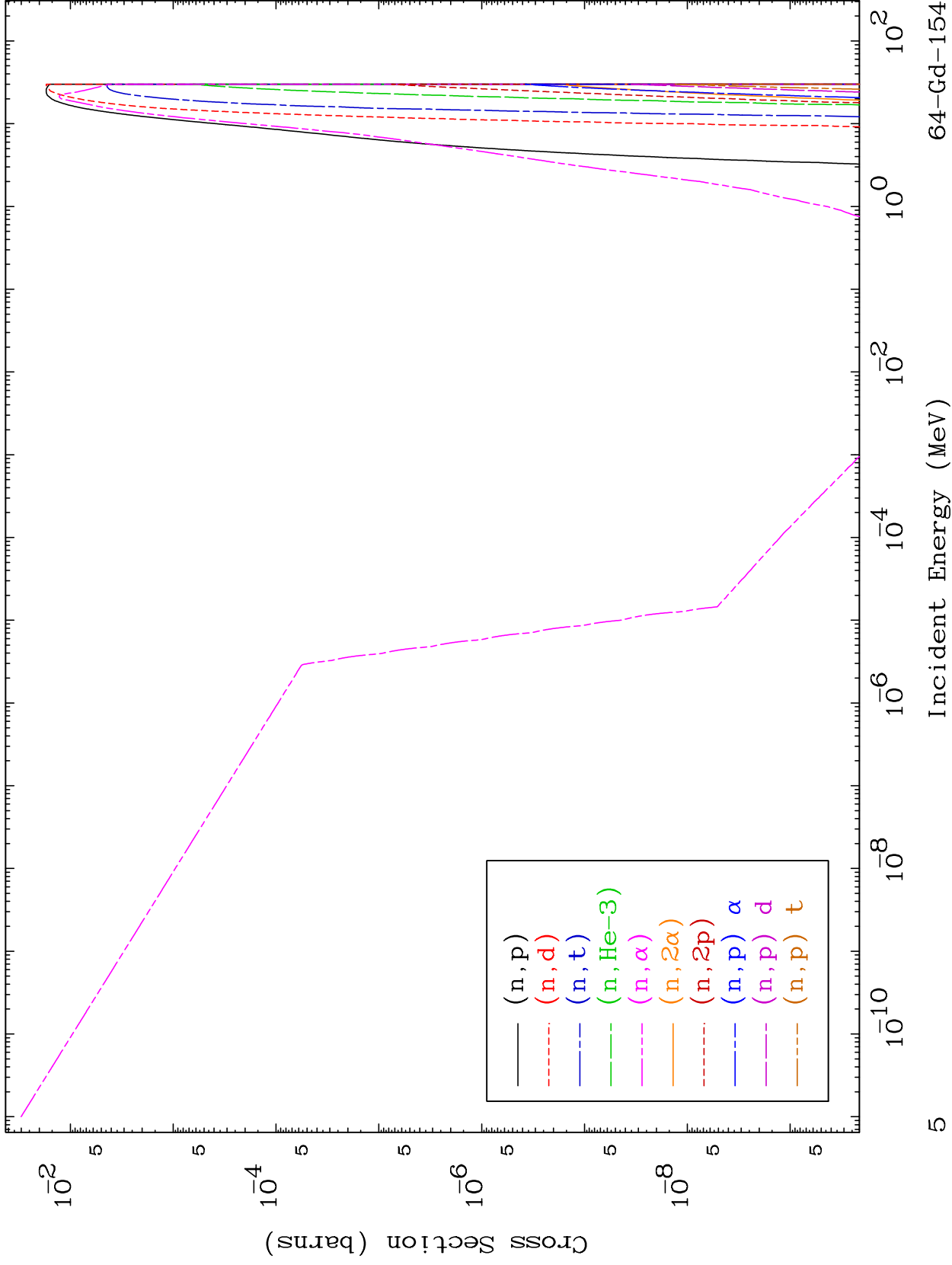
64-Gd-154



MAT 6431

Charged Particle  
293 Kelvin Cross Sections

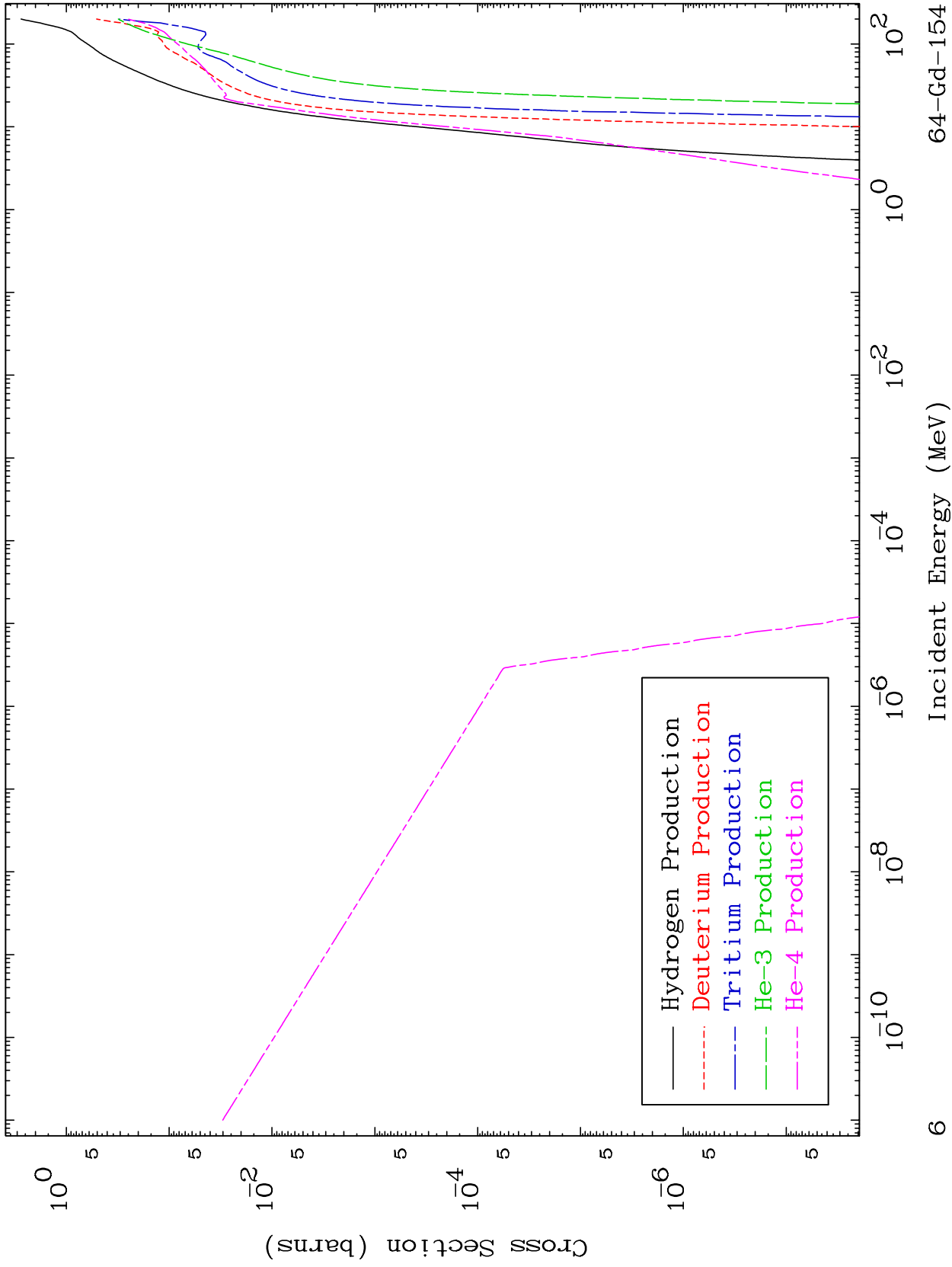
64-Gd-154



MAT 6431

Particle Production  
293 Kelvin Cross Sections

64-Gd-154

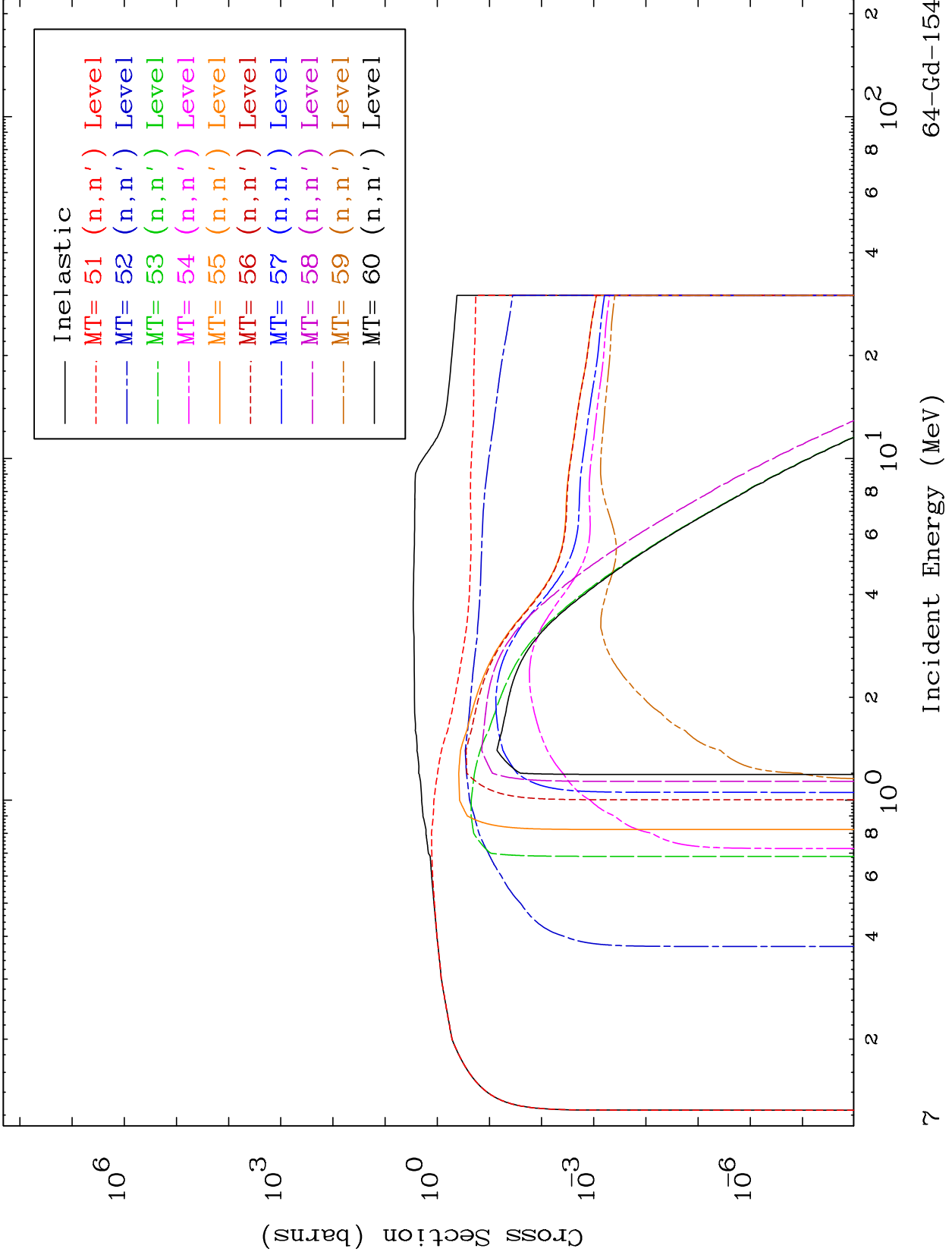


MAT 6431

(n,n') Level

64-Gd-154

293 Kelvin Cross Sections



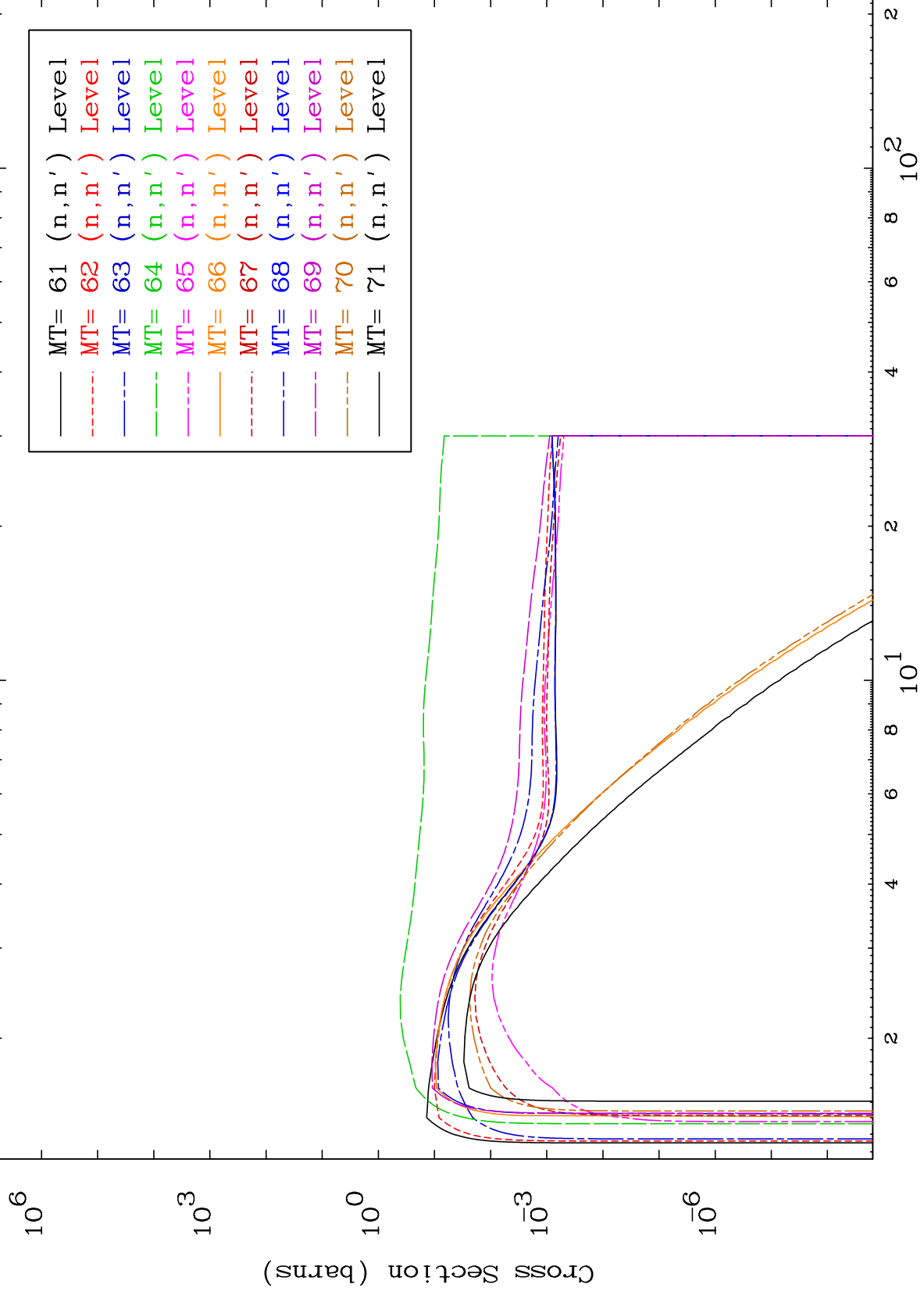


MAT 6431

(n,n') Level

64-Gd-154

293 Kelvin Cross Sections



8

Incident Energy (MeV)

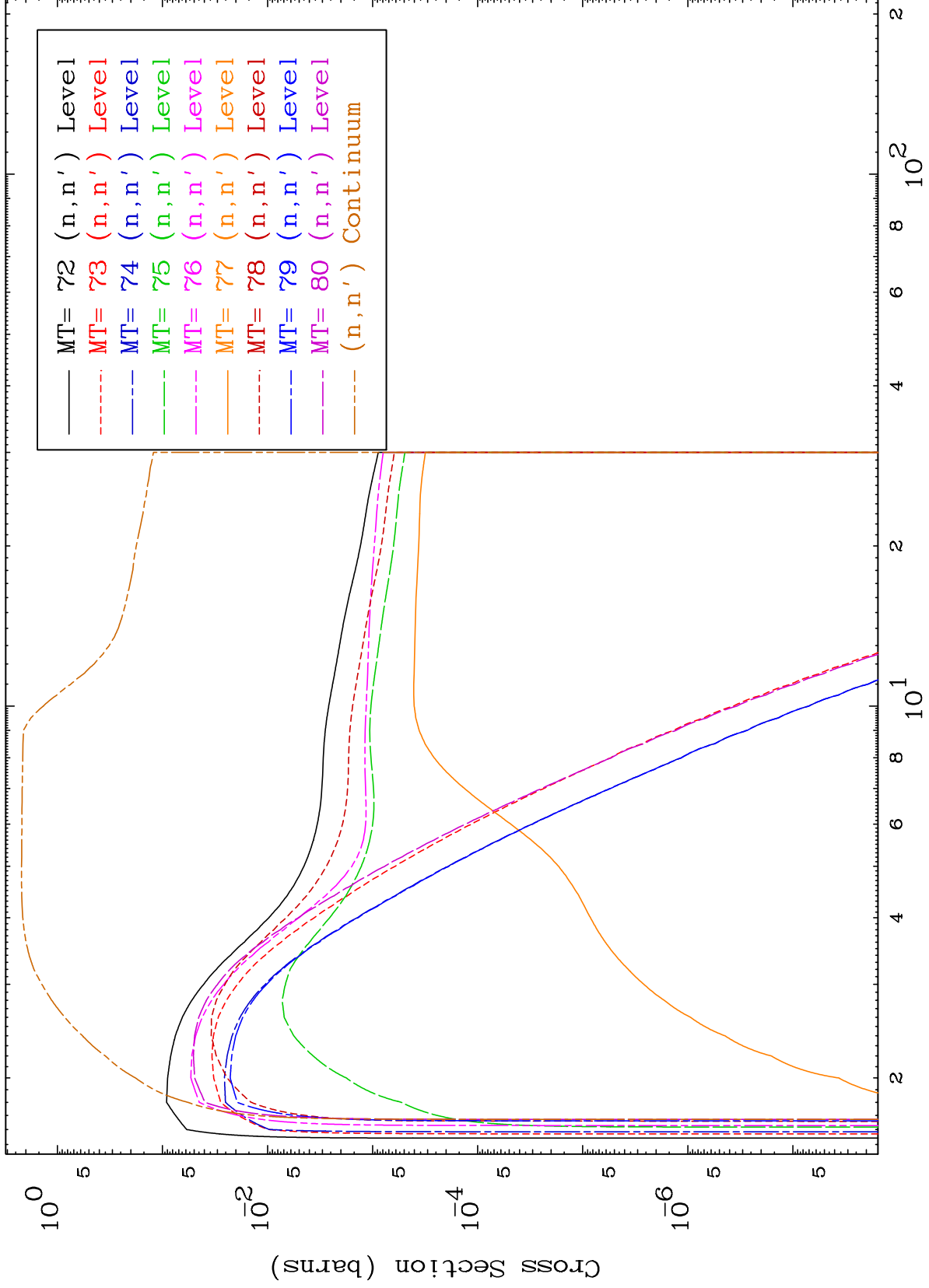
64-Gd-154

MAT 6431

(n,n') Level

64-Gd-154

293 Kelvin Cross Sections



9

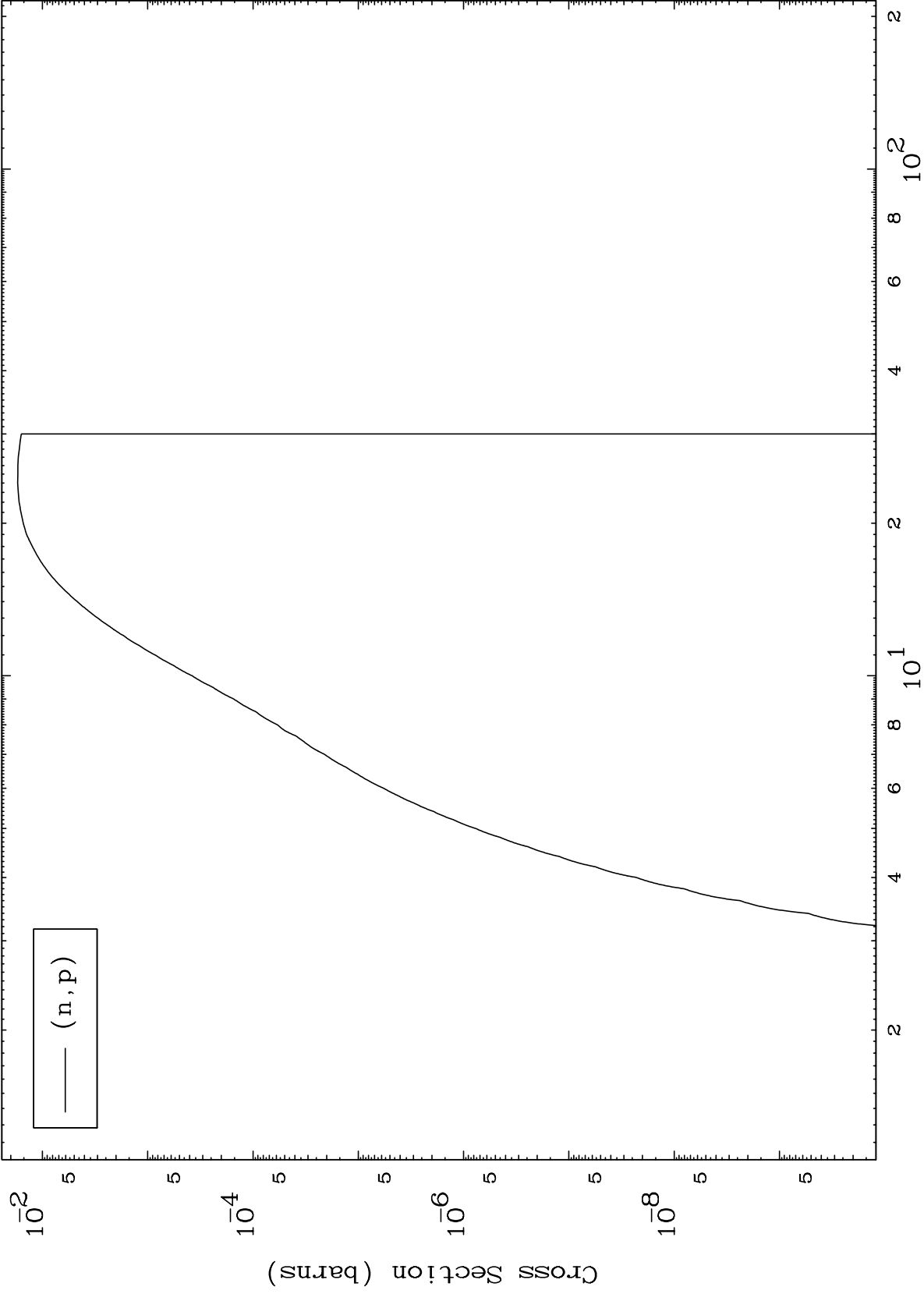
Incident Energy (MeV)

64-Gd-154

MAT 6431

(n,p) Levels  
293 Kelvin Cross Sections

64-Gd-154



(n,p)

10

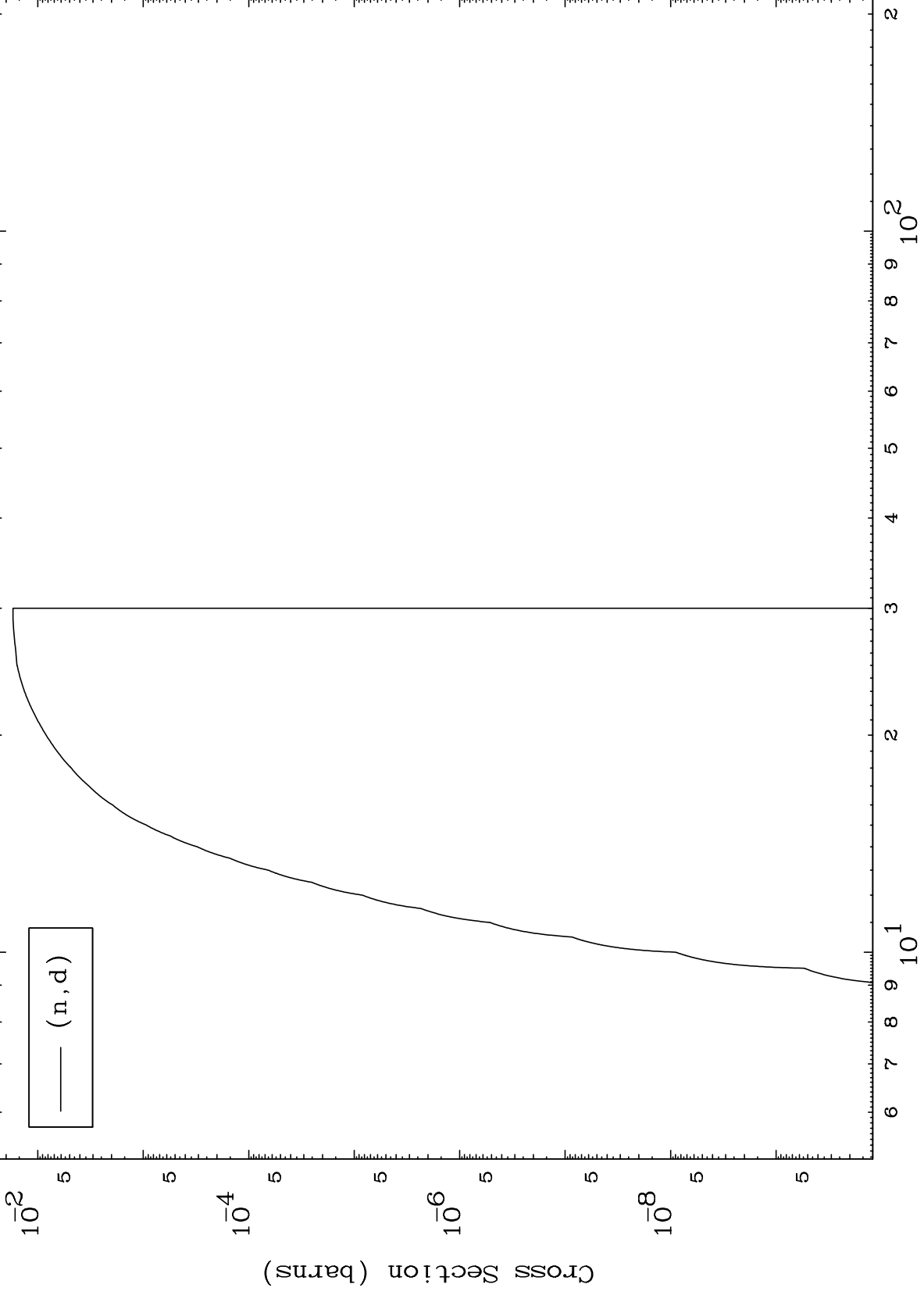
Incident Energy (MeV)

64-Gd-154

MAT 6431

(n,d) Levels  
293 Kelvin Cross Sections

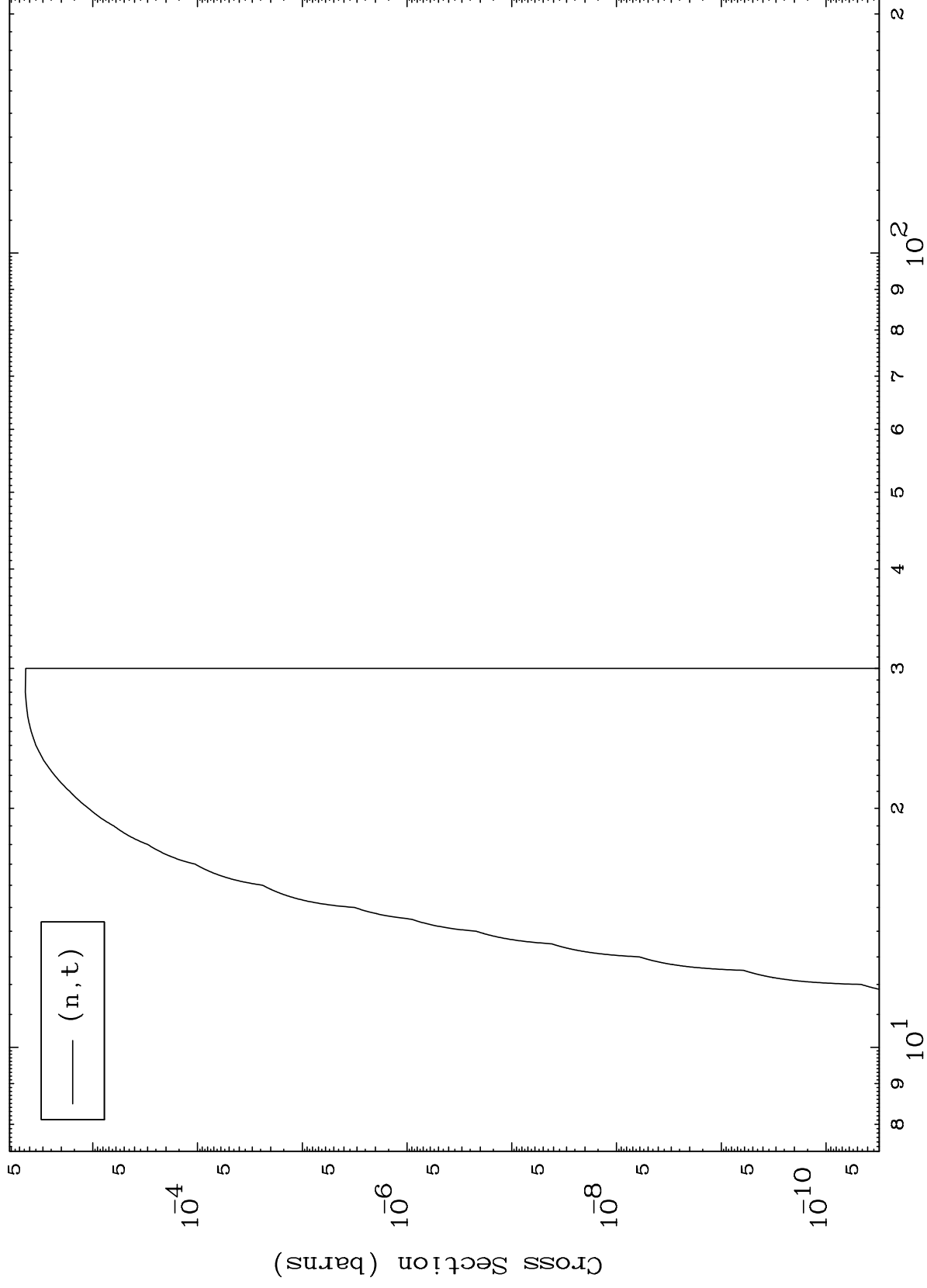
64-Gd-154



MAT 6431

(n,t) Levels  
293 Kelvin Cross Sections

64-Gd-154



12

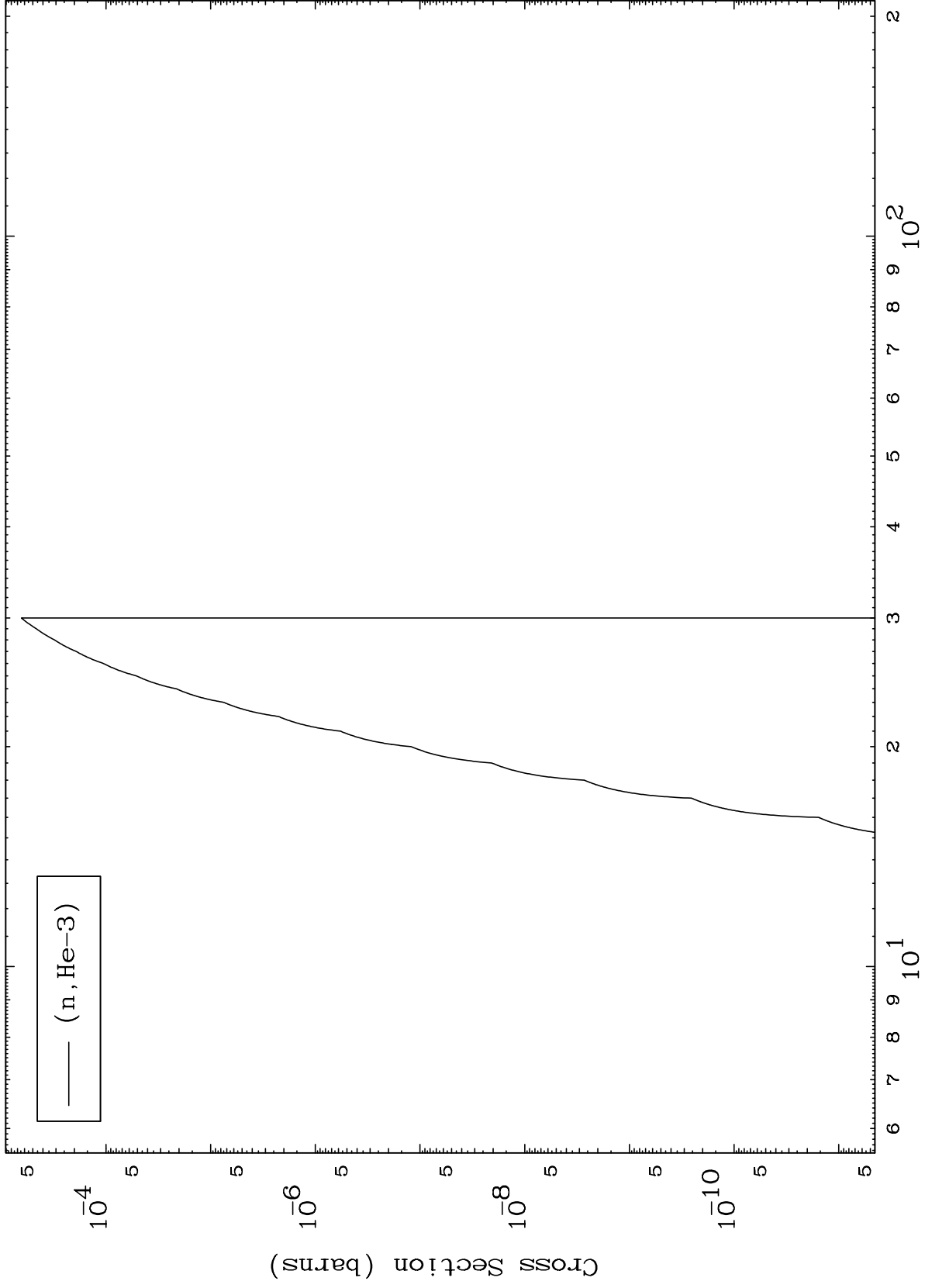
Incident Energy (MeV)

64-Gd-154

MAT 6431

(n,He3) Levels  
293 Kelvin Cross Sections

64-Gd-154



13

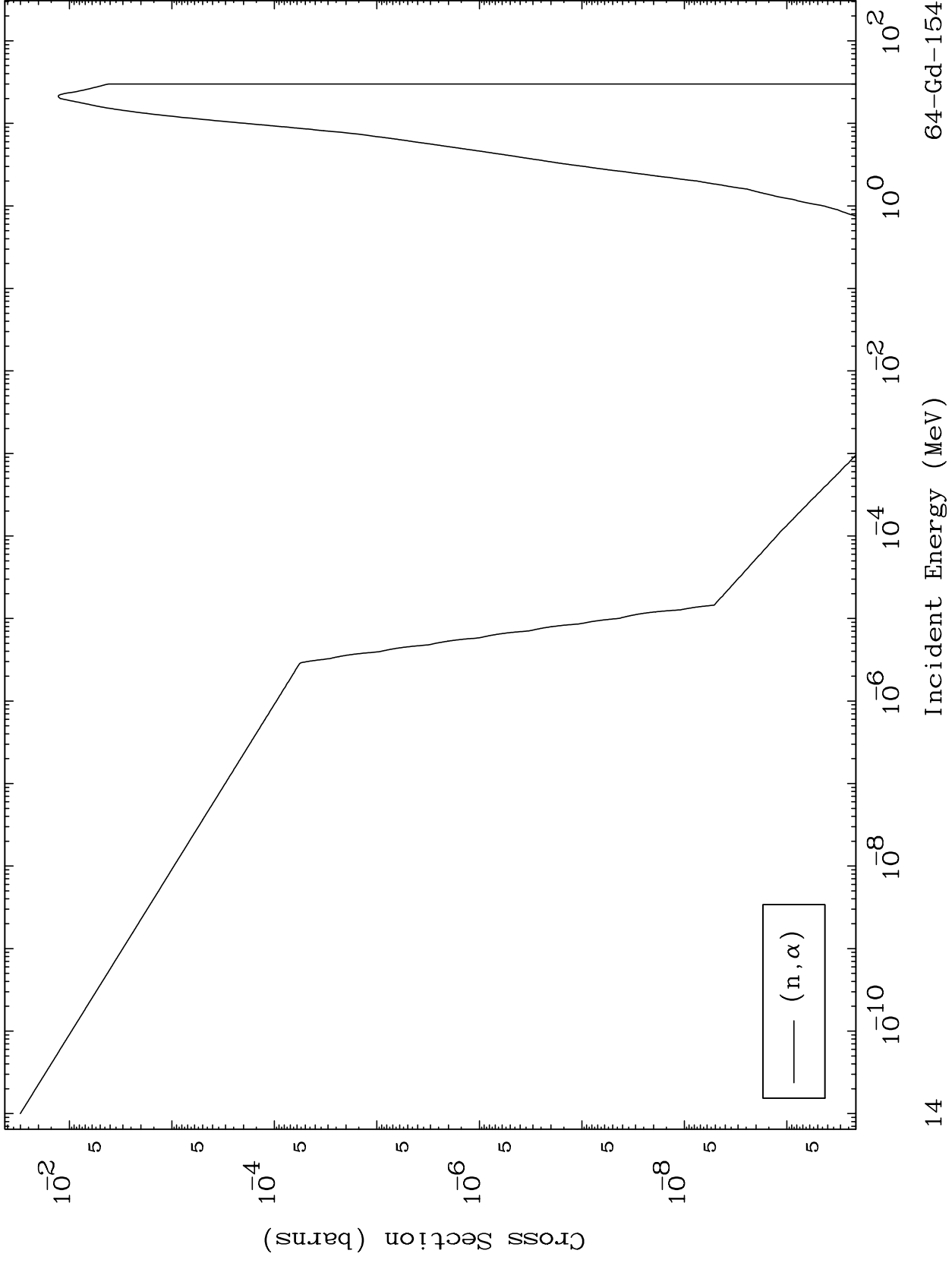
Incident Energy (MeV)

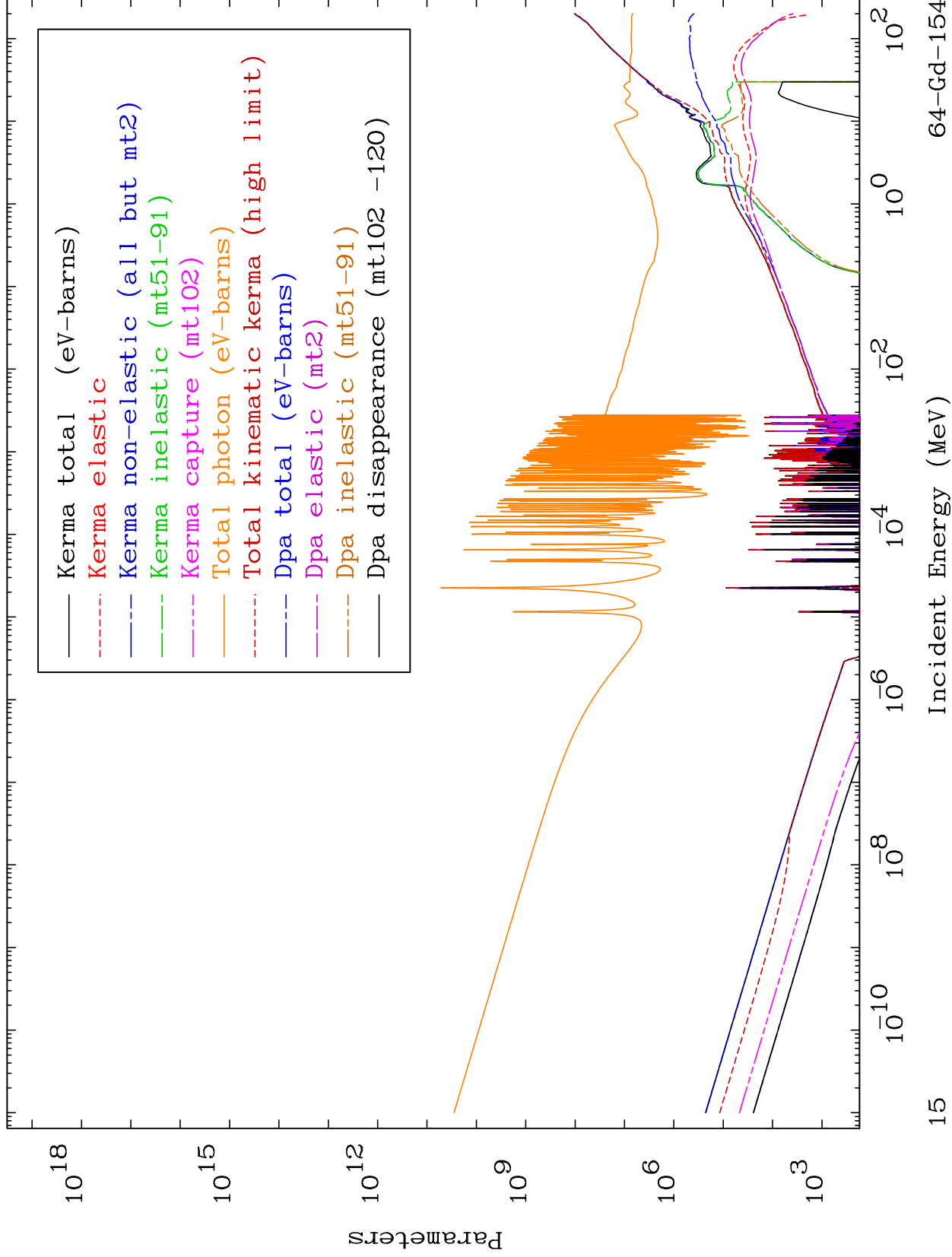
64-Gd-154

MAT 6431

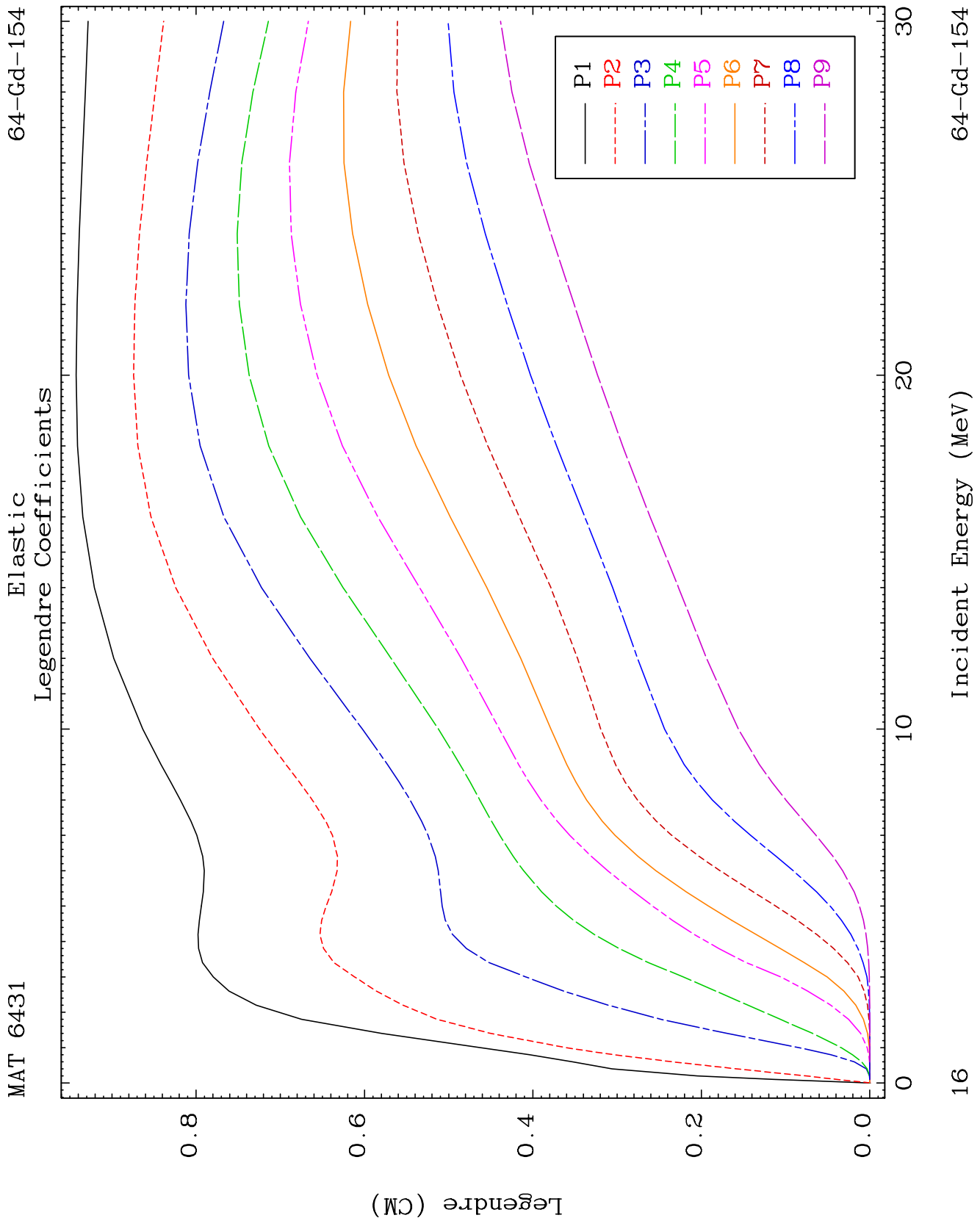
(n,α) Levels  
293 Kelvin Cross Sections

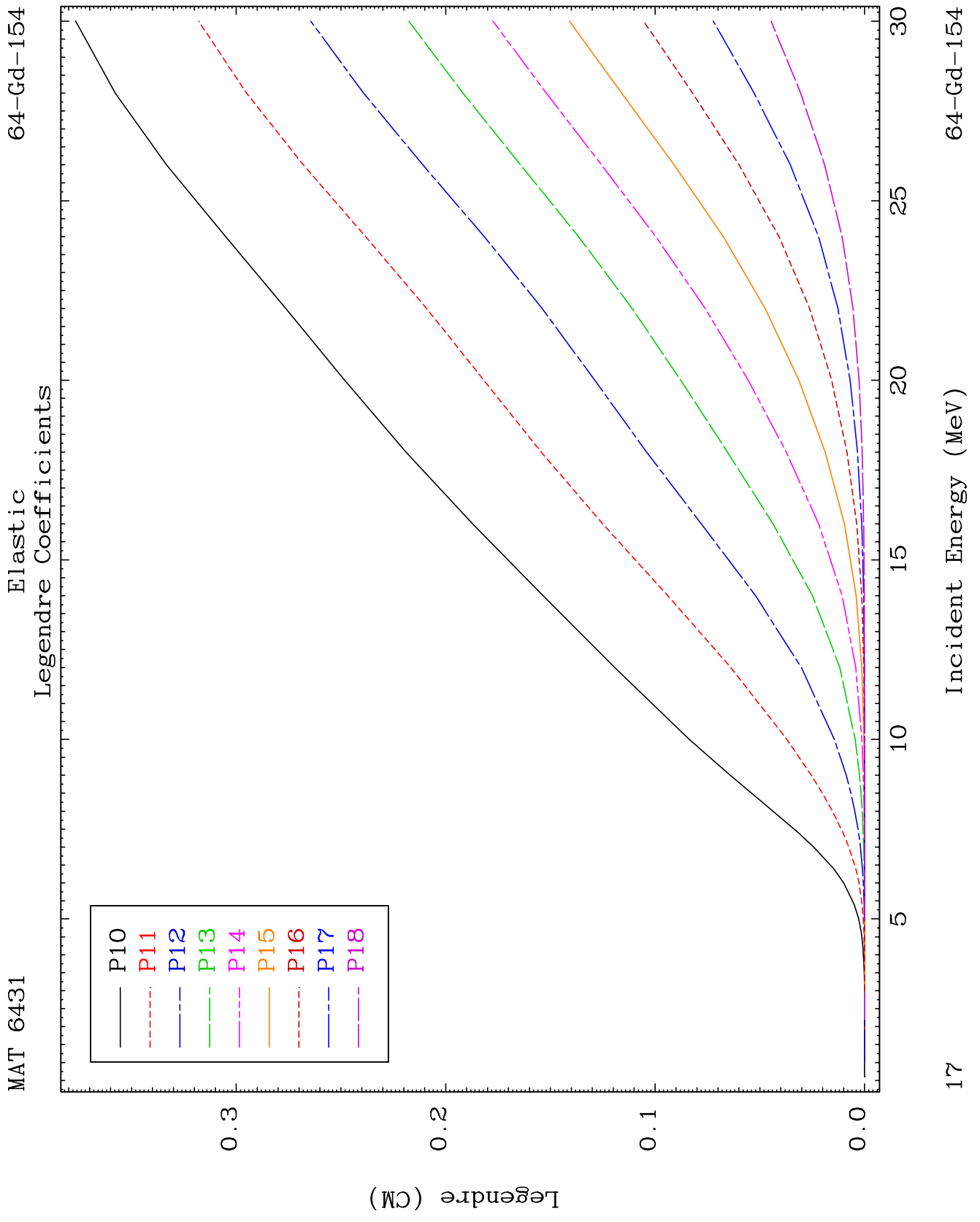
64-Gd-154

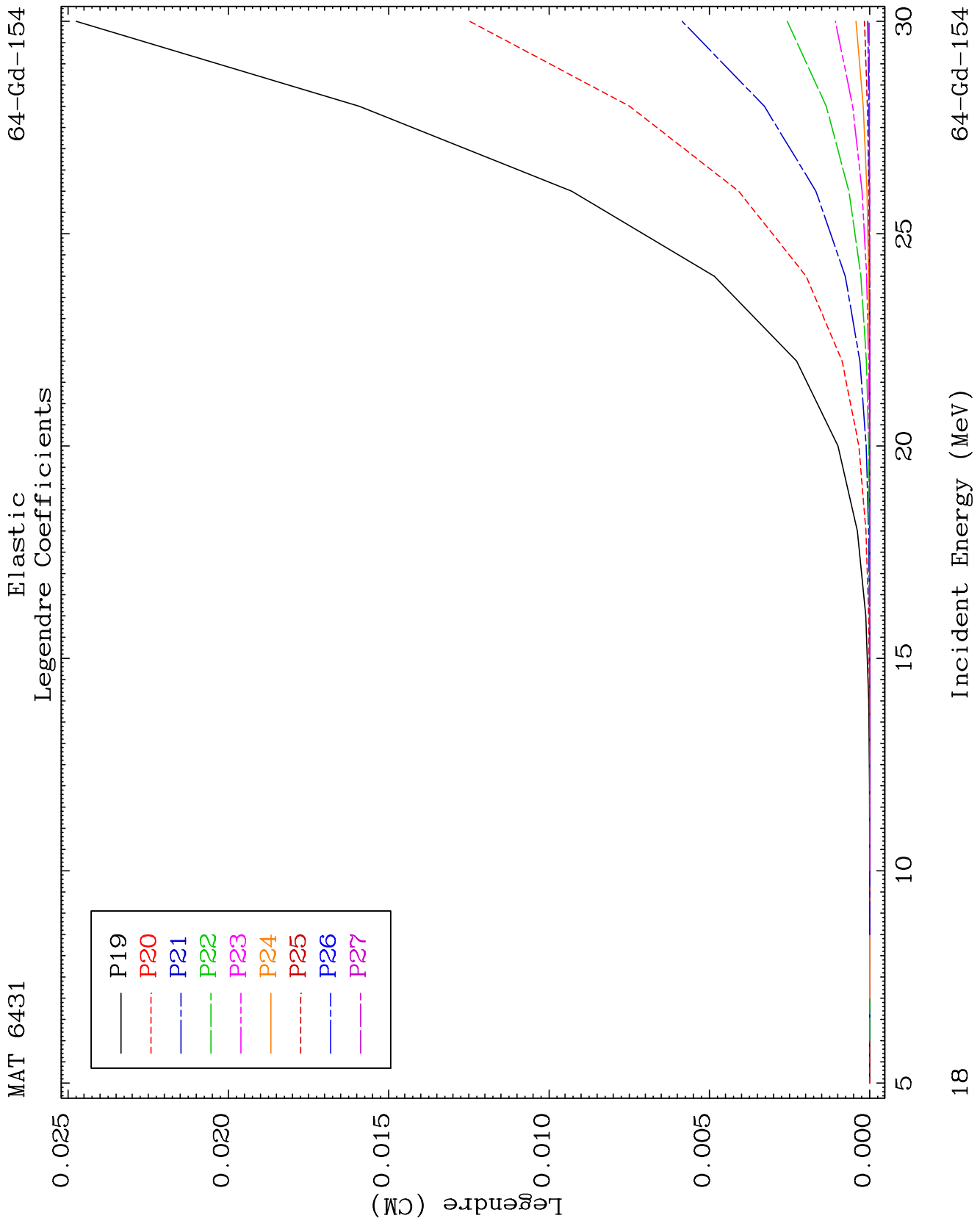








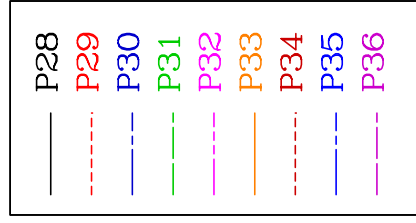




MAT 6431

Elastic  
Legendre Coefficients

64-Gd-154



$\times 10^{-6}$

Legendre (CM)

6

4

2

0

15

20

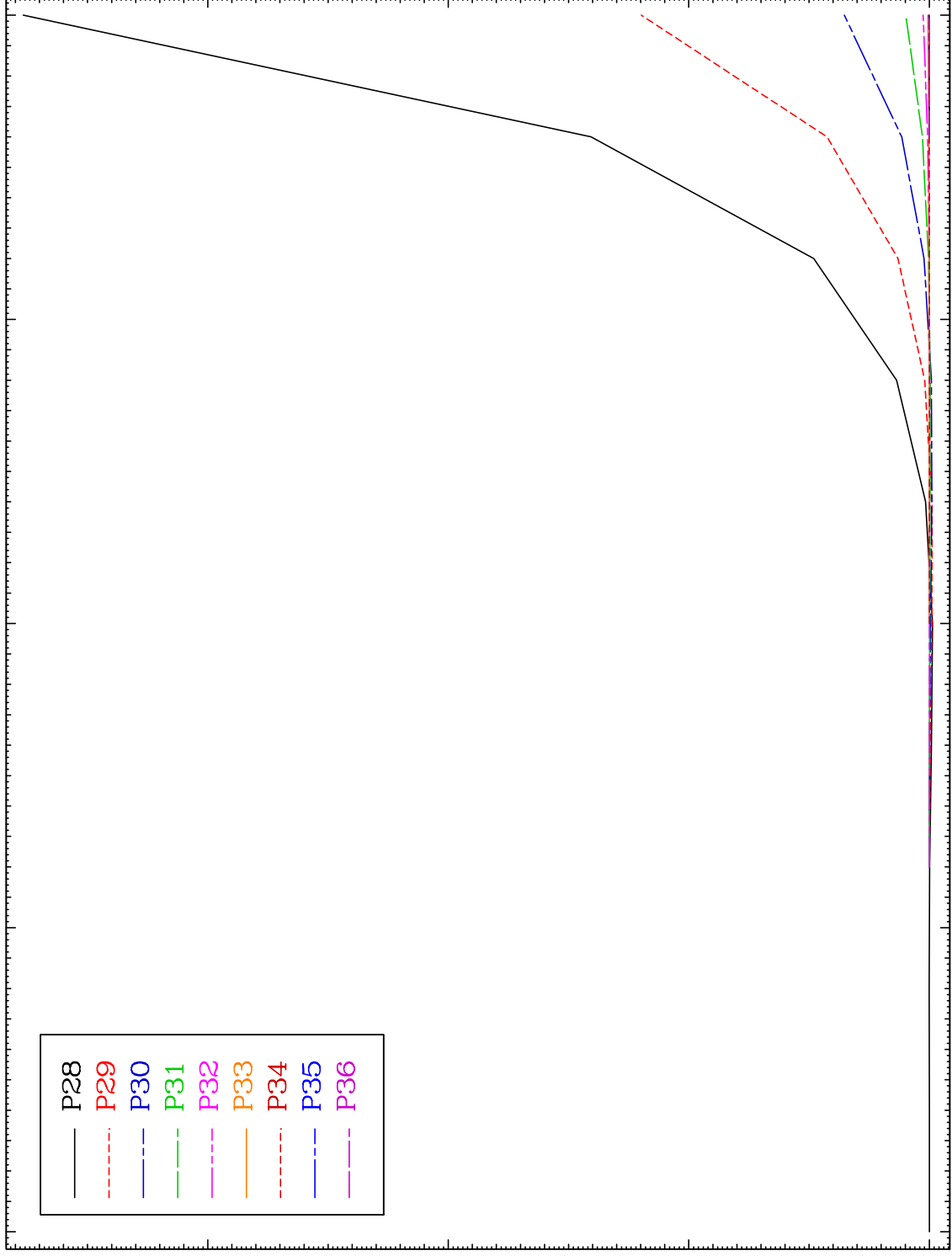
25

30

19

Incident Energy (MeV)

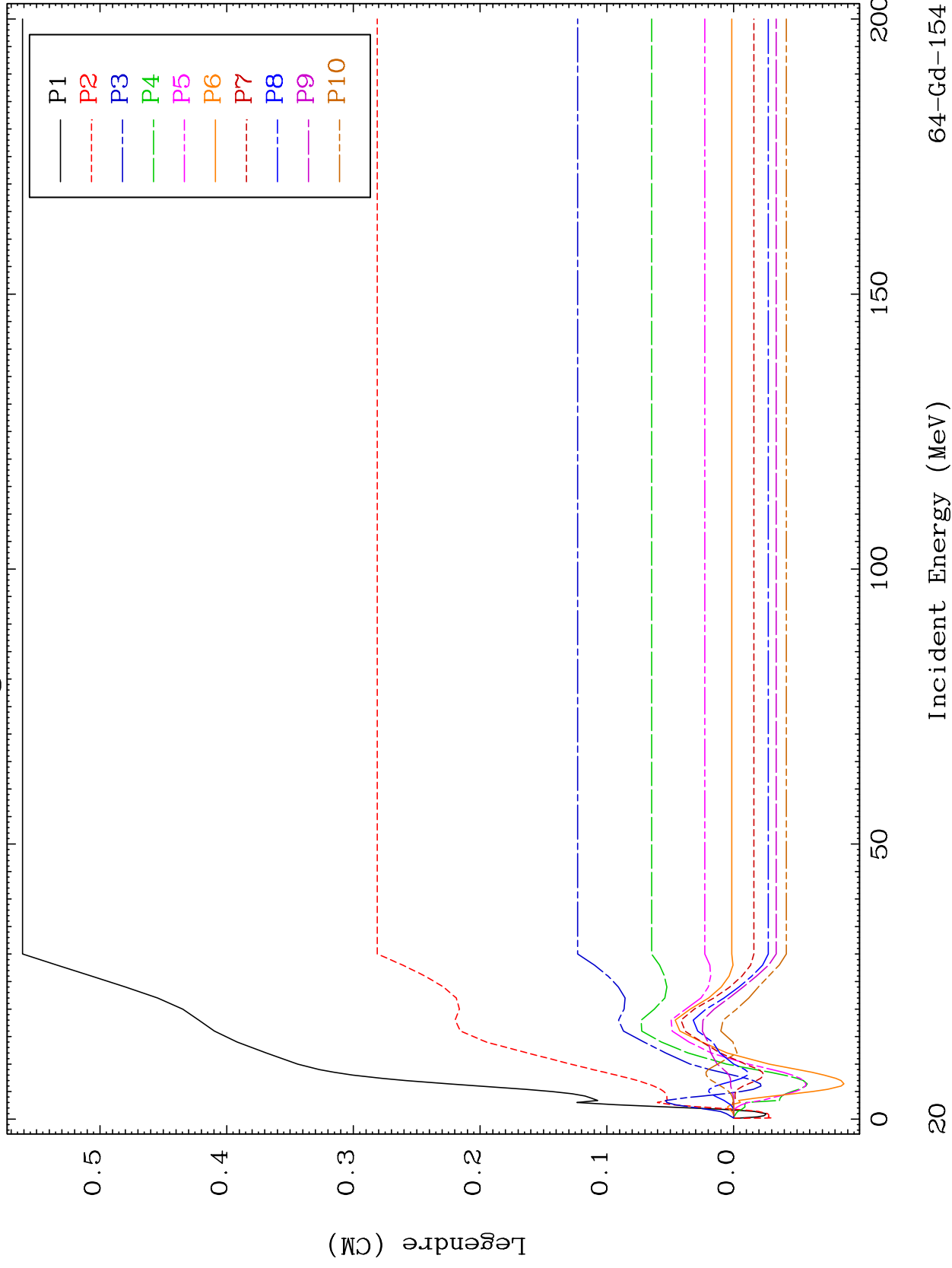
64-Gd-154



MAT 6431

MT= 51 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

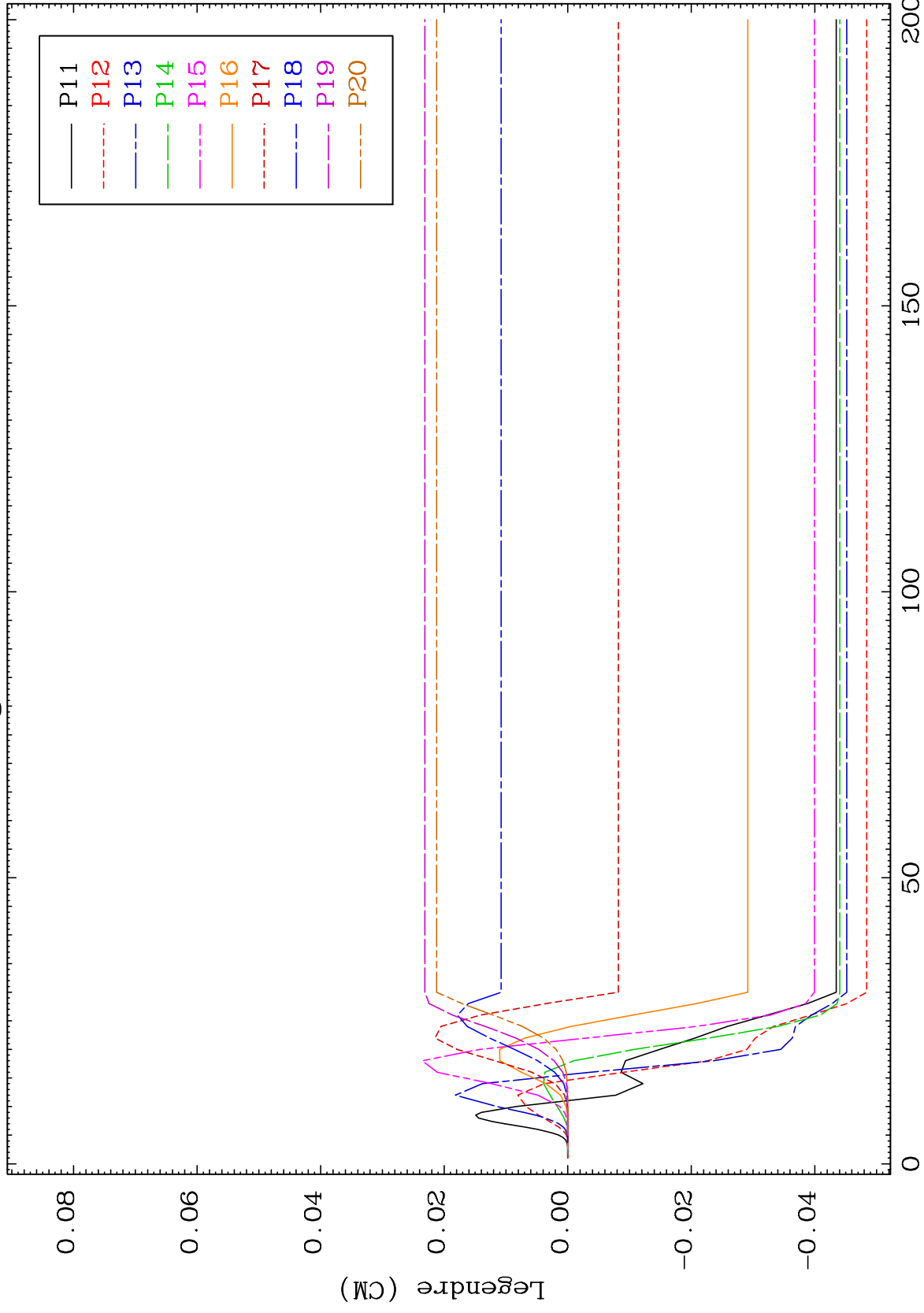
Incident Energy (MeV)

20

MAT 6431

MT= 51 (n,n') Level  
Legendre Coefficients

64-Gd-154



21

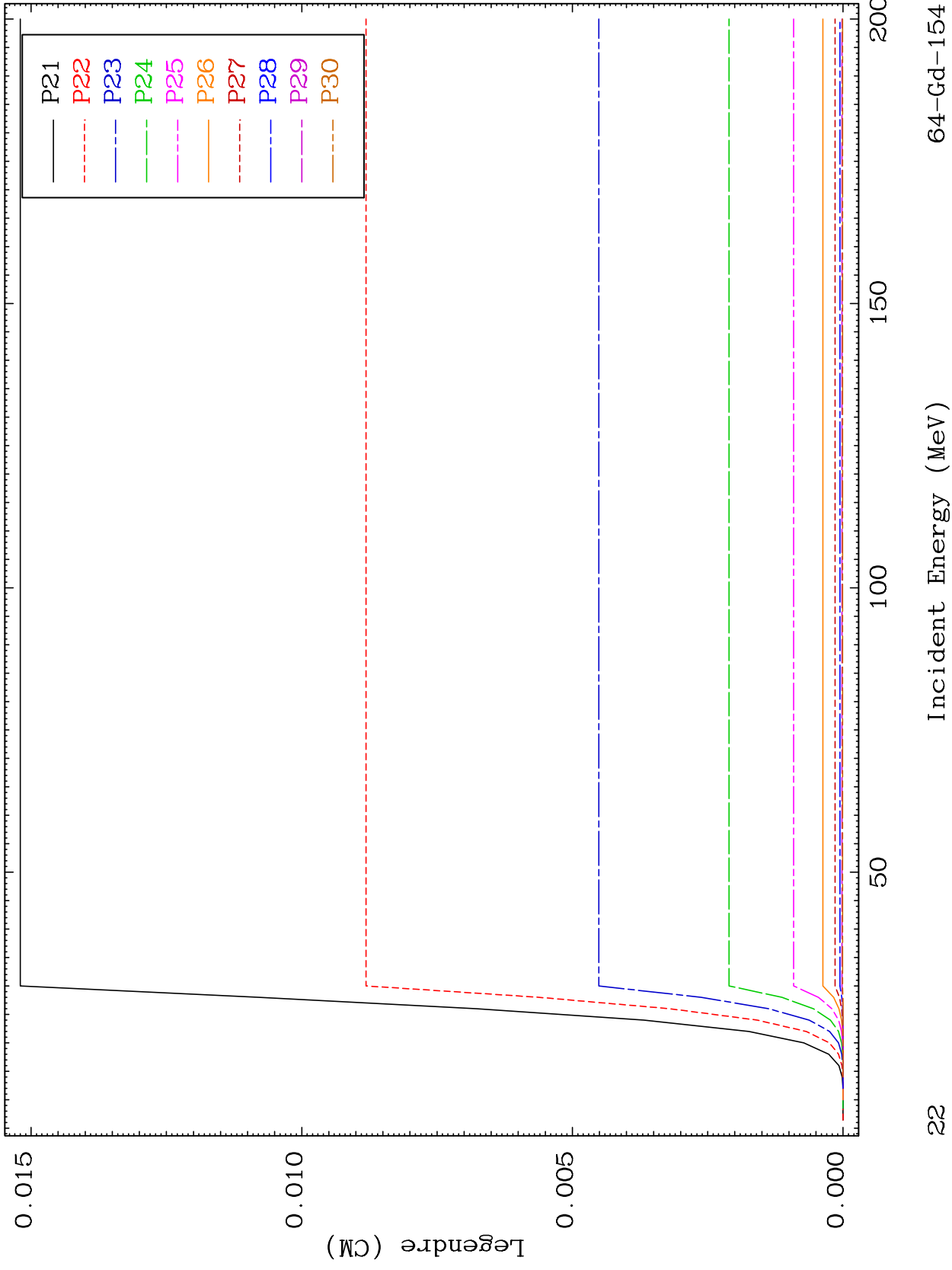
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 51 (n,n') Level  
Legendre Coefficients

64-Gd-154

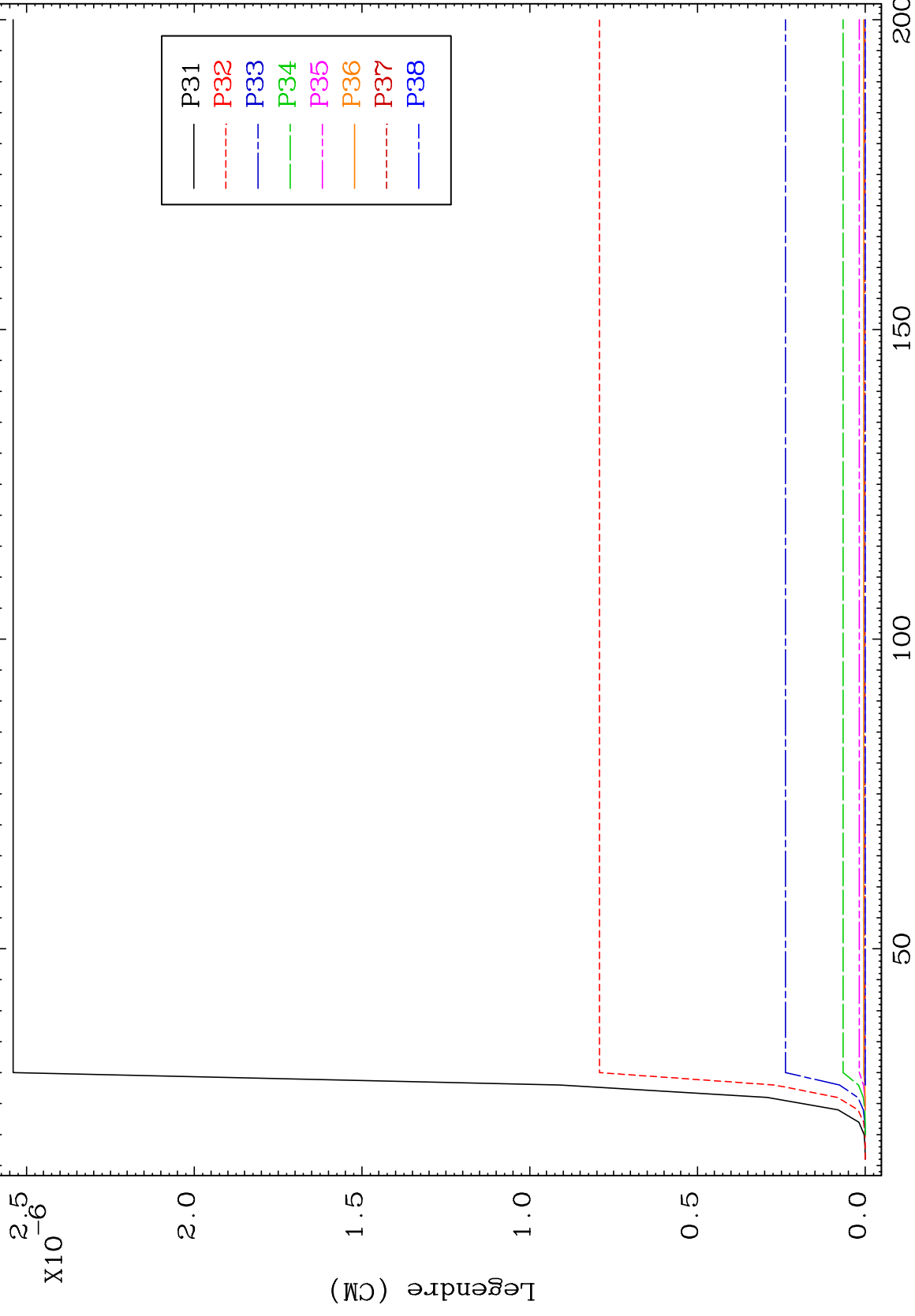


22

MAT 6431

MT= 51 (n,n') Level  
Legendre Coefficients

64-Gd-154



23

Incident Energy (MeV)

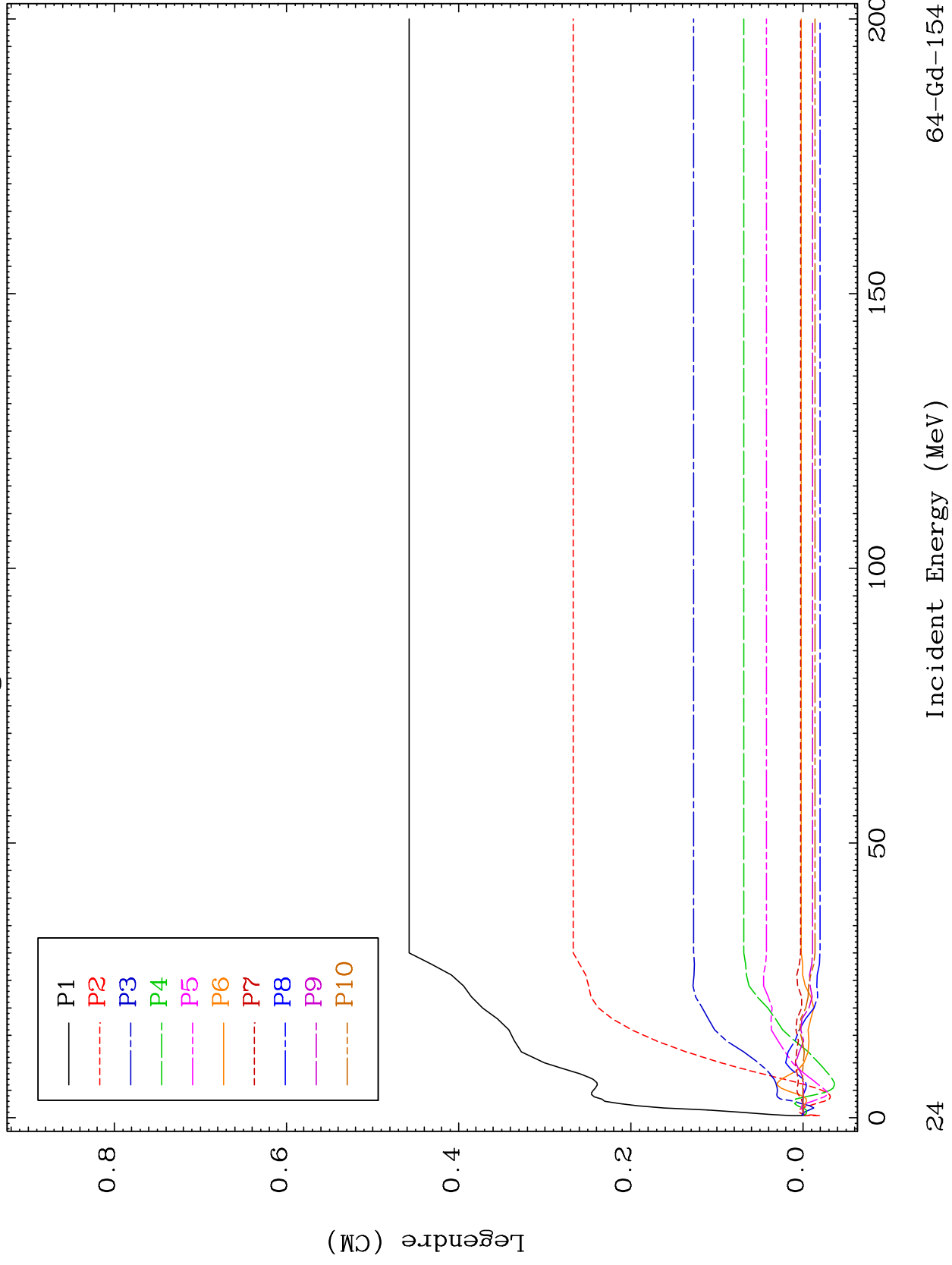
64-Gd-154



MAT 6431

MT= 52 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

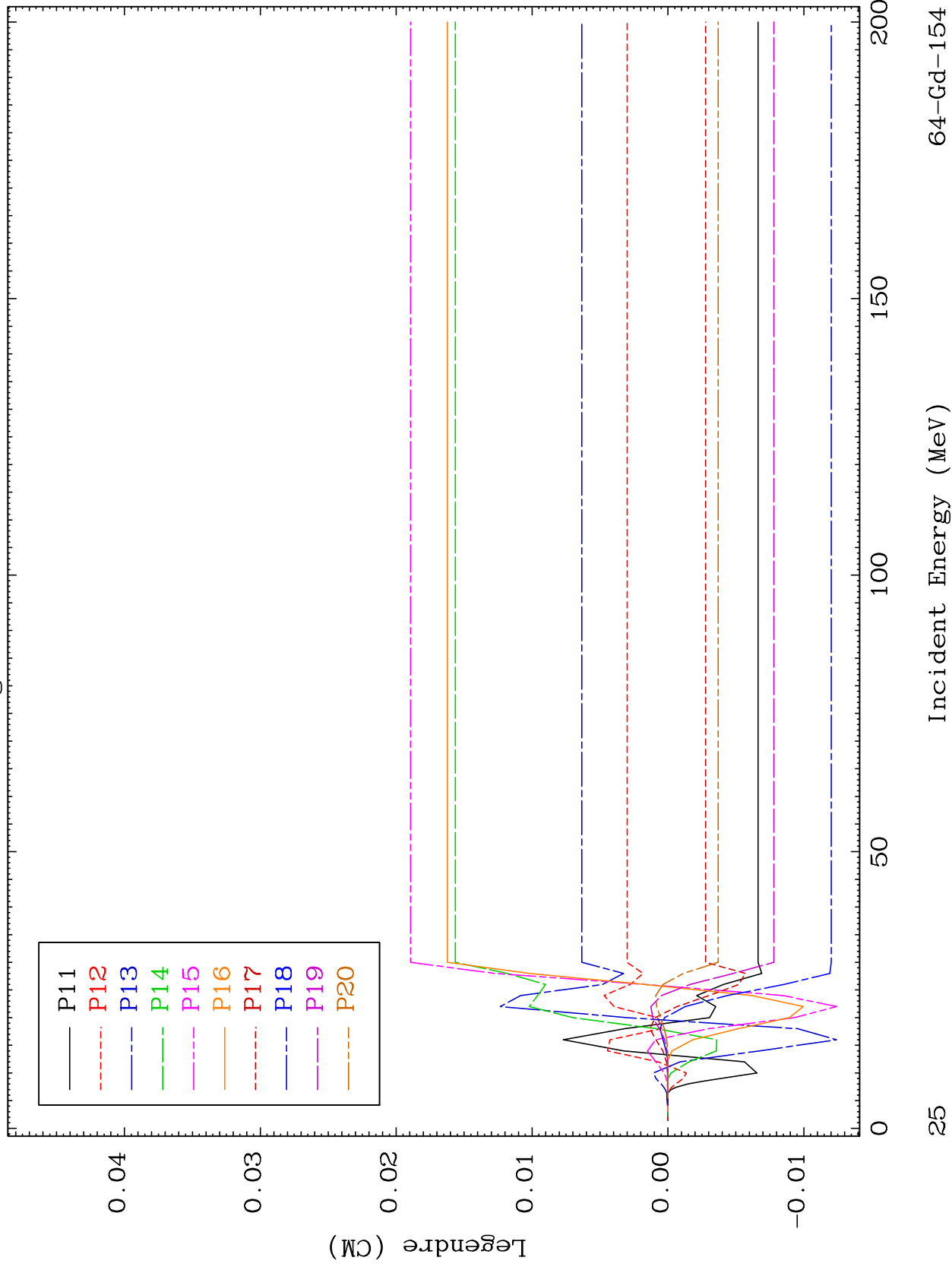
Incident Energy (MeV)

24

MAT 6431

MT= 52 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

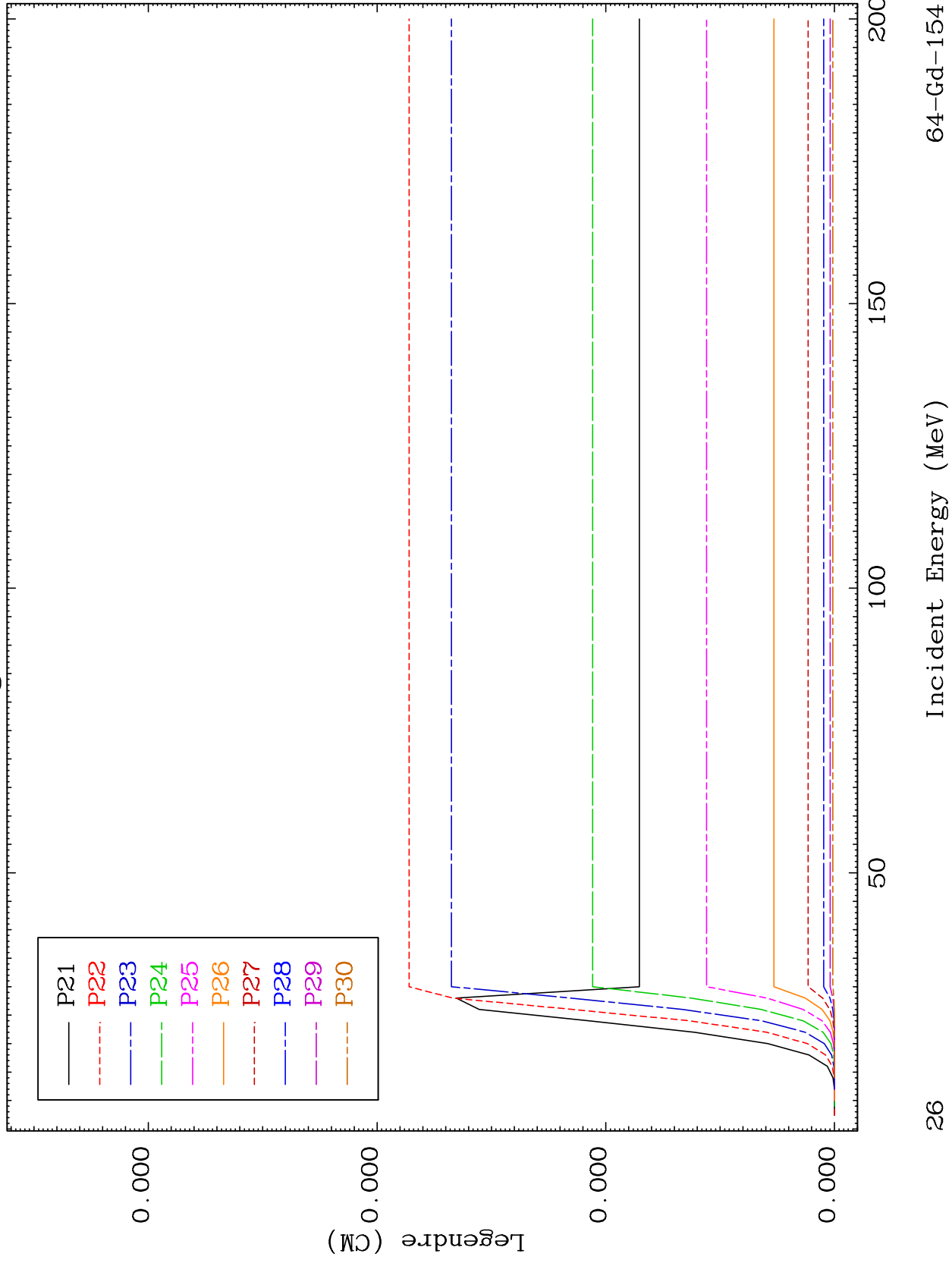
Incident Energy (MeV)

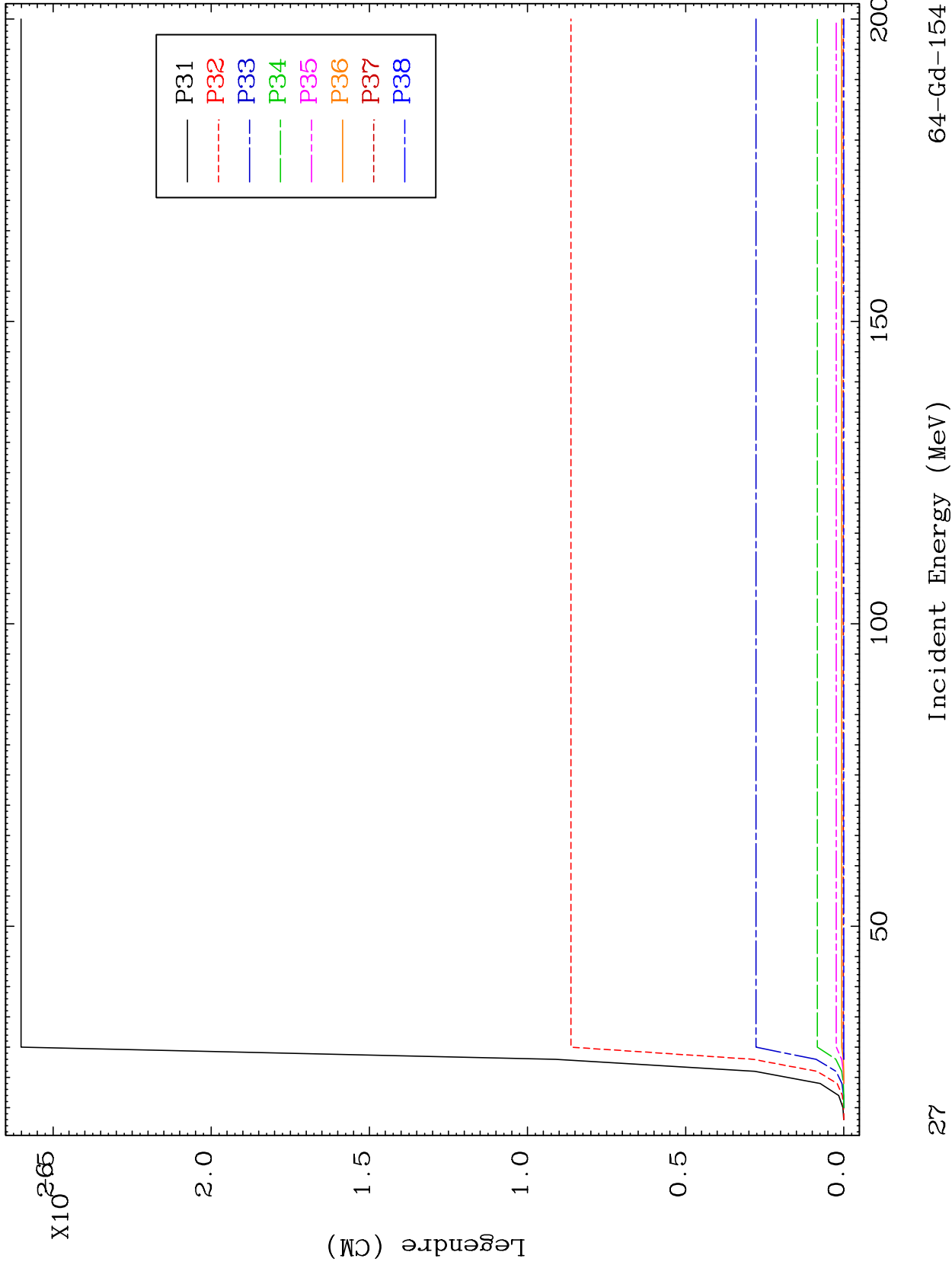
25

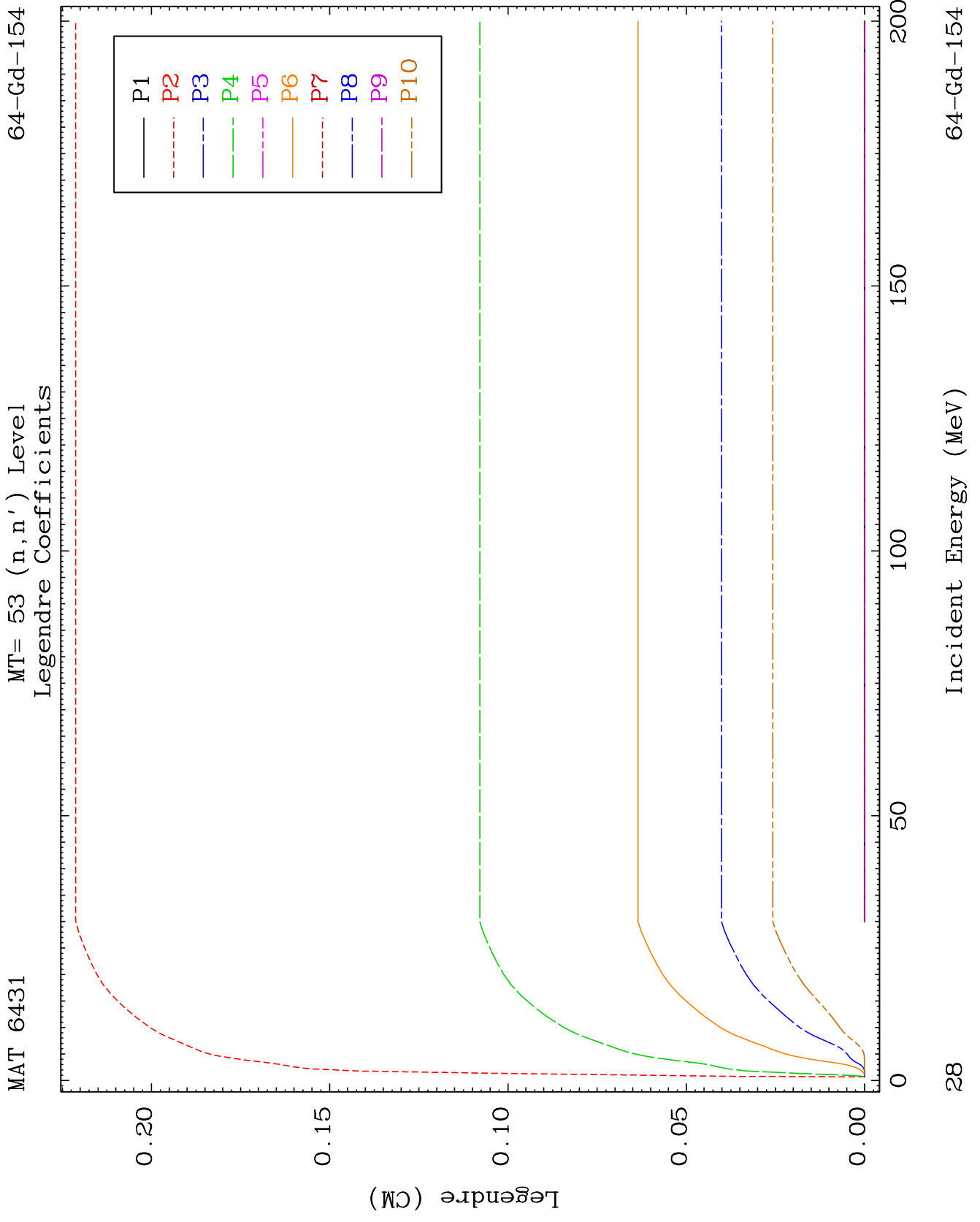
MAT 6431

MT= 52 (n,n') Level  
Legendre Coefficients

64-Gd-154



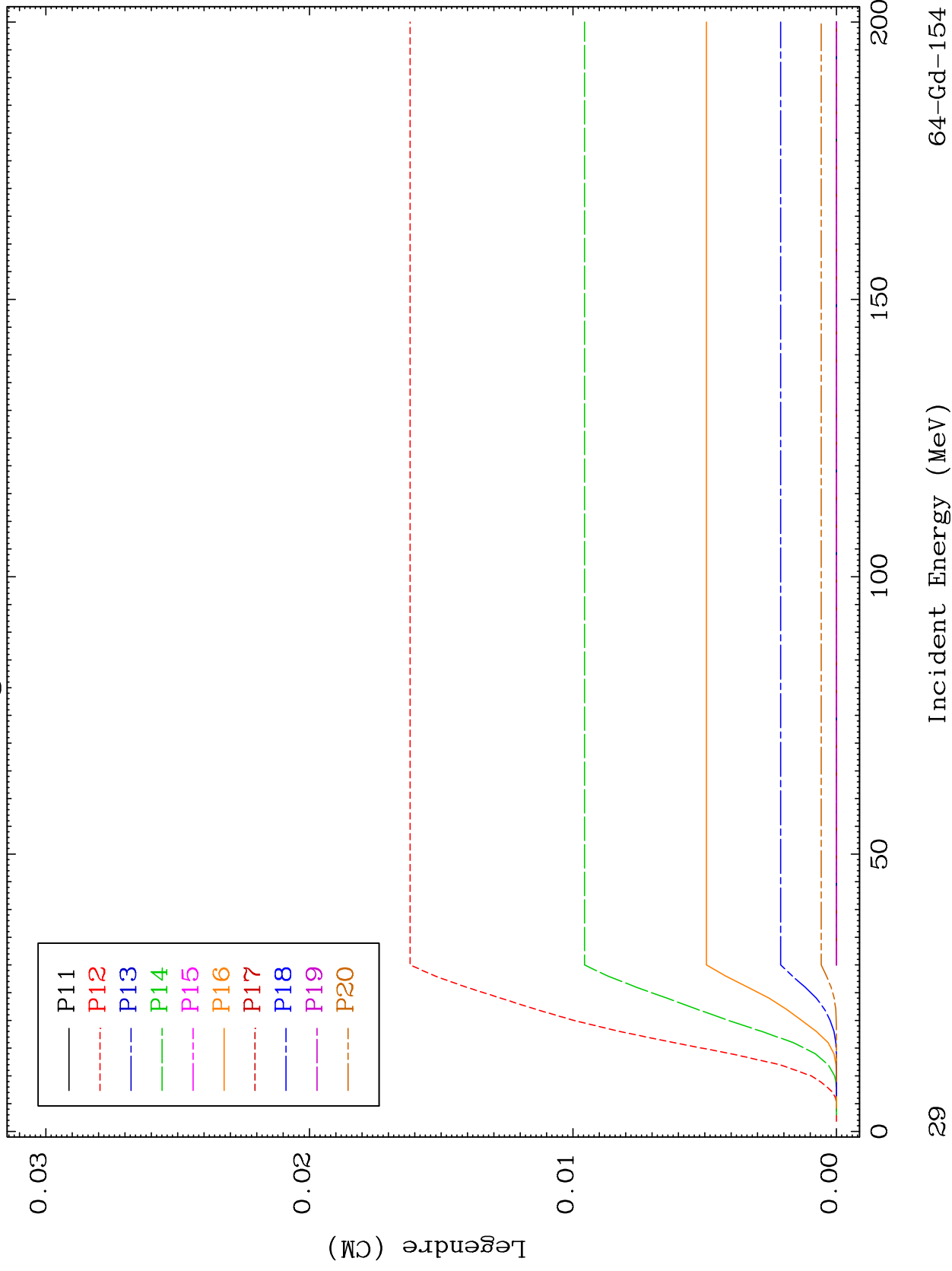




MAT 6431

MT= 53 (n,n') Level  
Legendre Coefficients

64-Gd-154

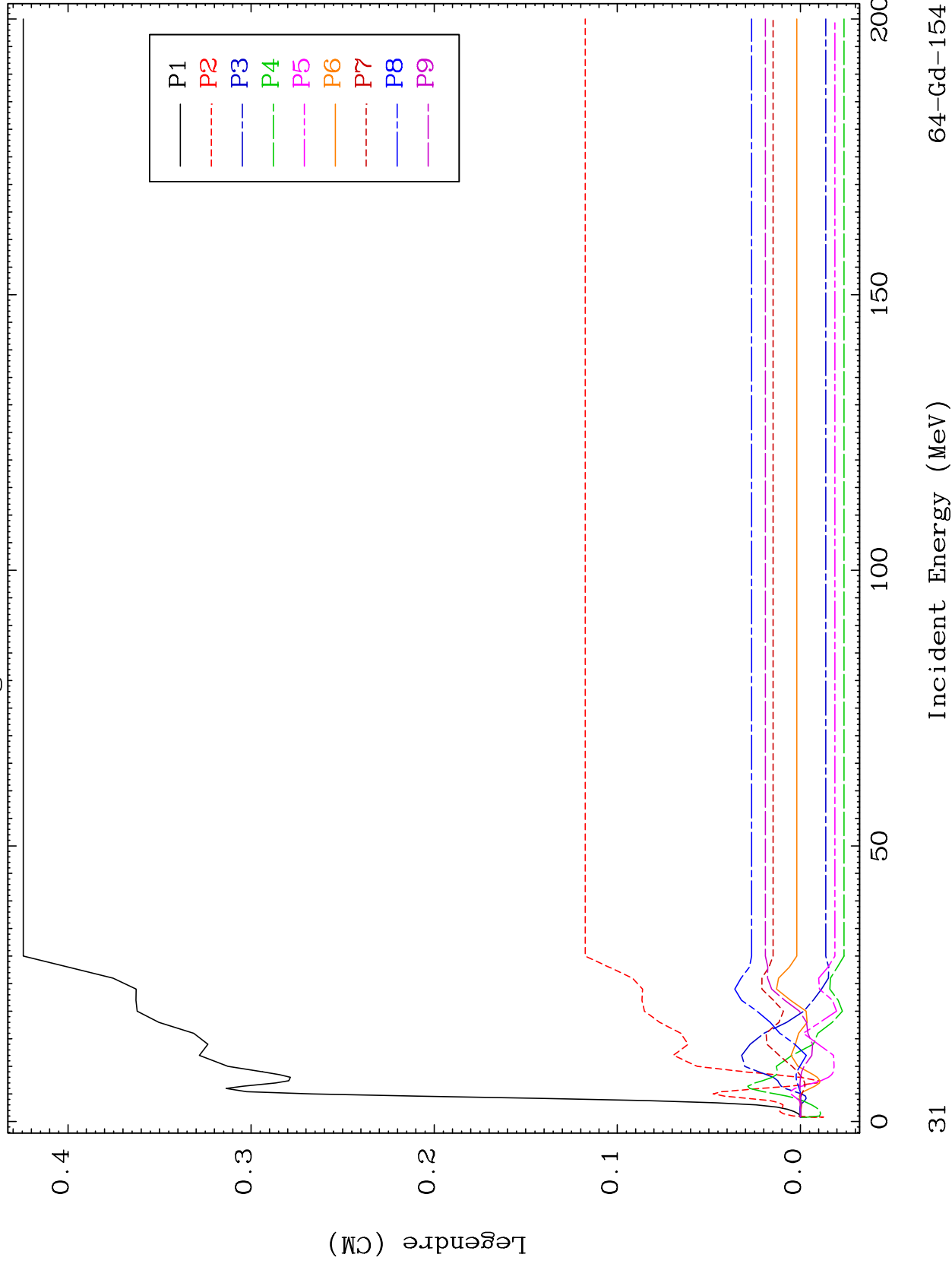




MAT 6431

MT= 54 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

Incident Energy (MeV)

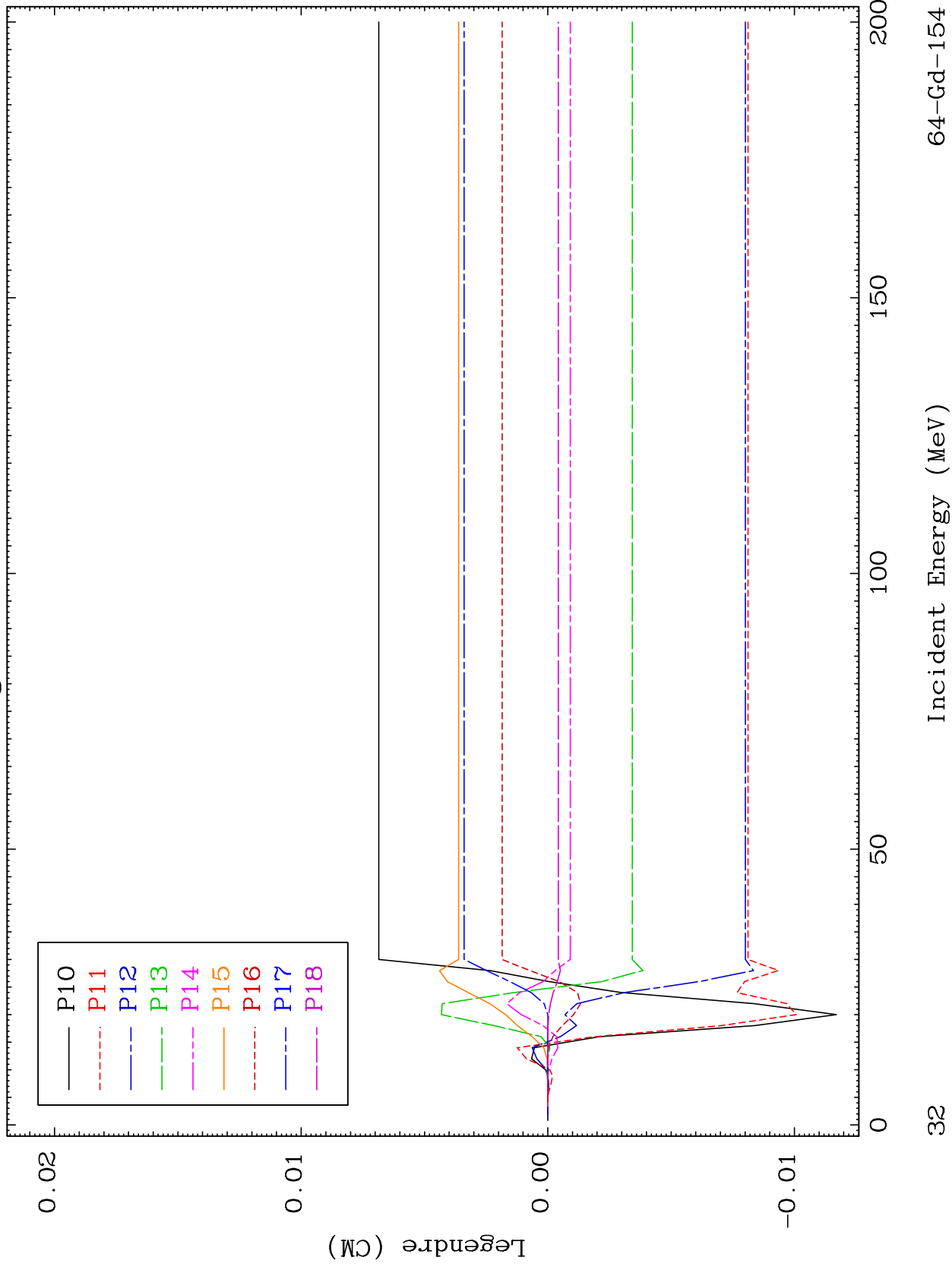
31



MAT 6431

MT= 54 (n,n') Level  
Legendre Coefficients

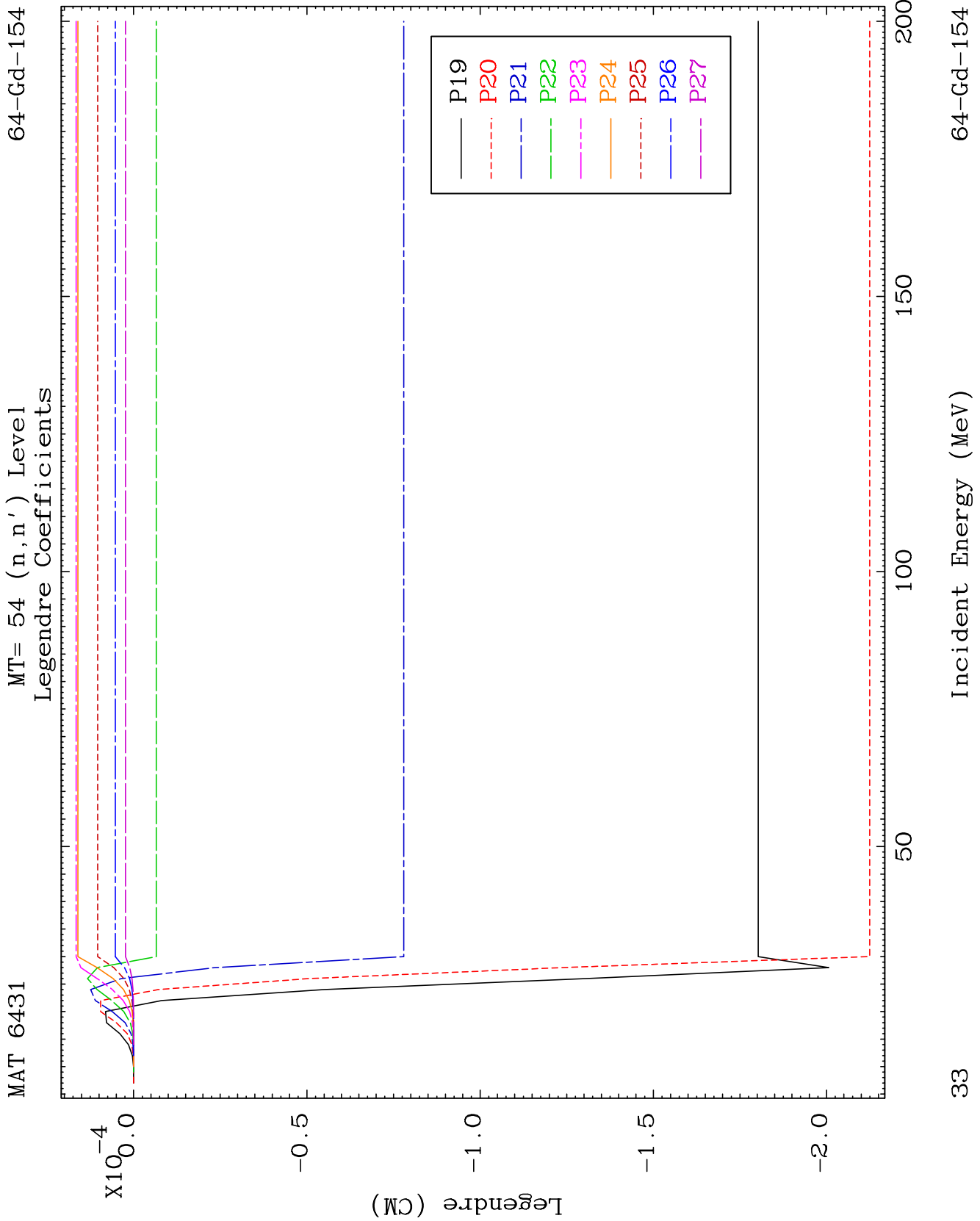
64-Gd-154



32

Incident Energy (MeV)

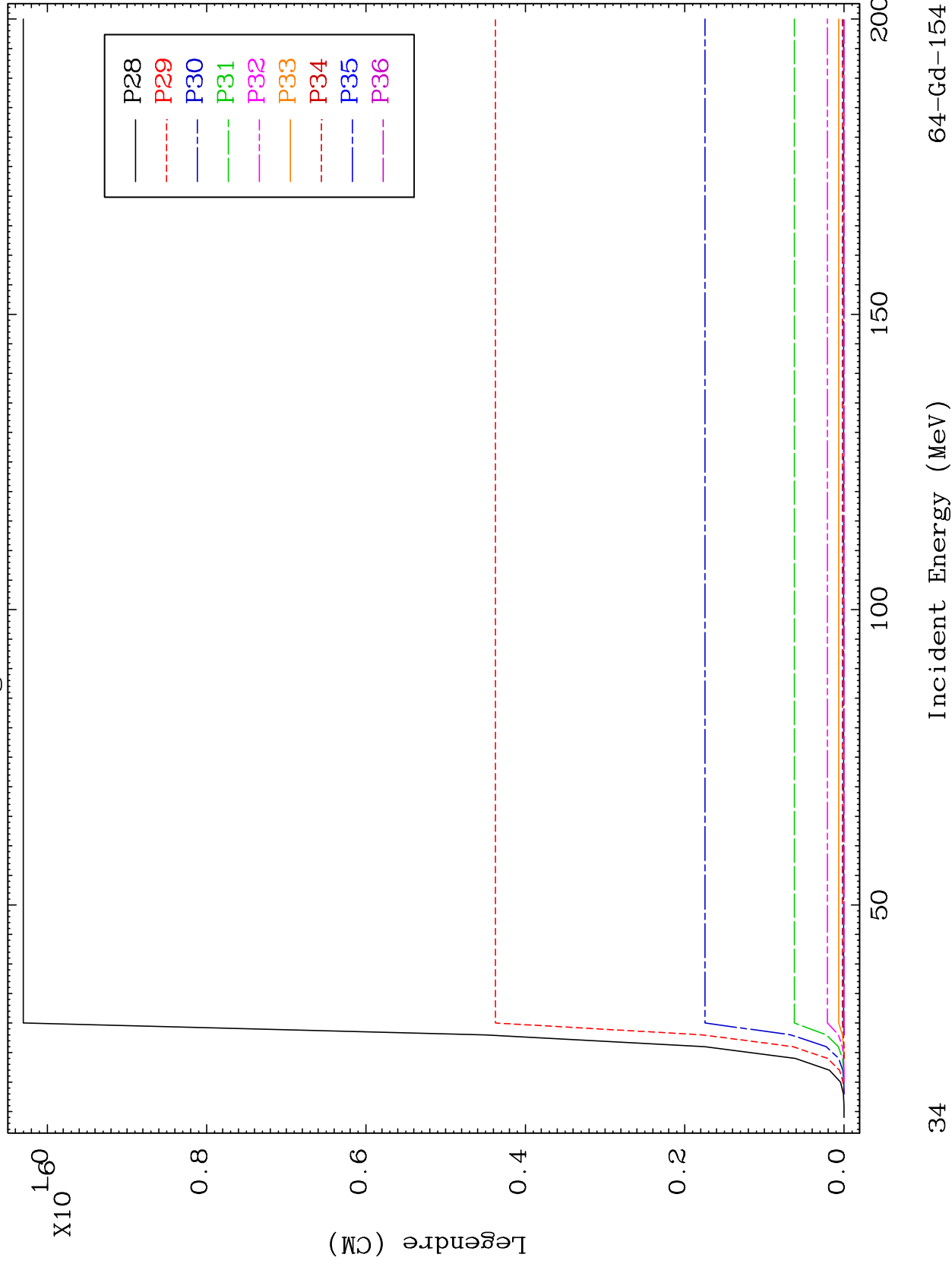
64-Gd-154



MAT 6431

MT= 54 (n,n') Level  
Legendre Coefficients

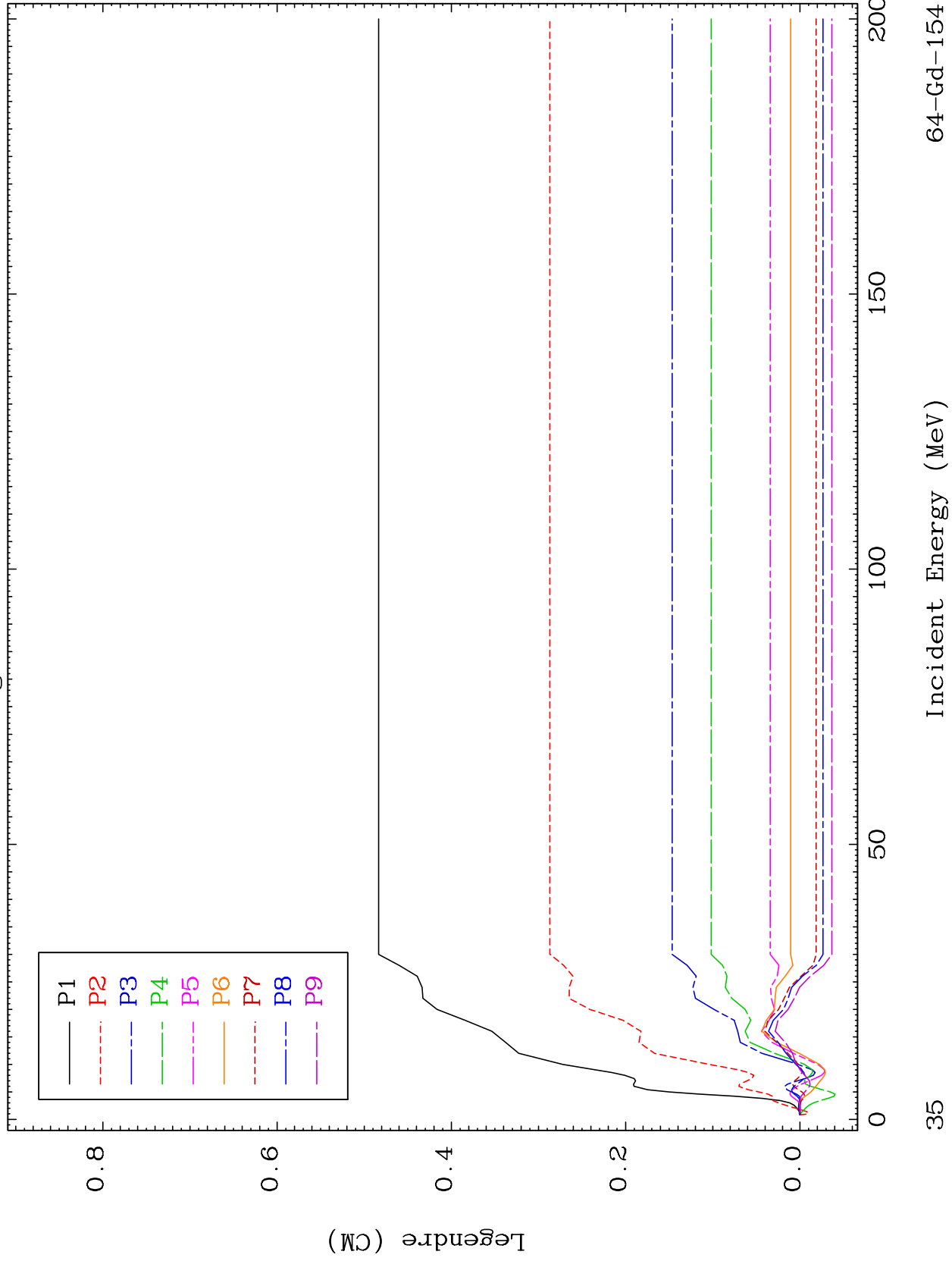
64-Gd-154



MAT 6431

MT= 55 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

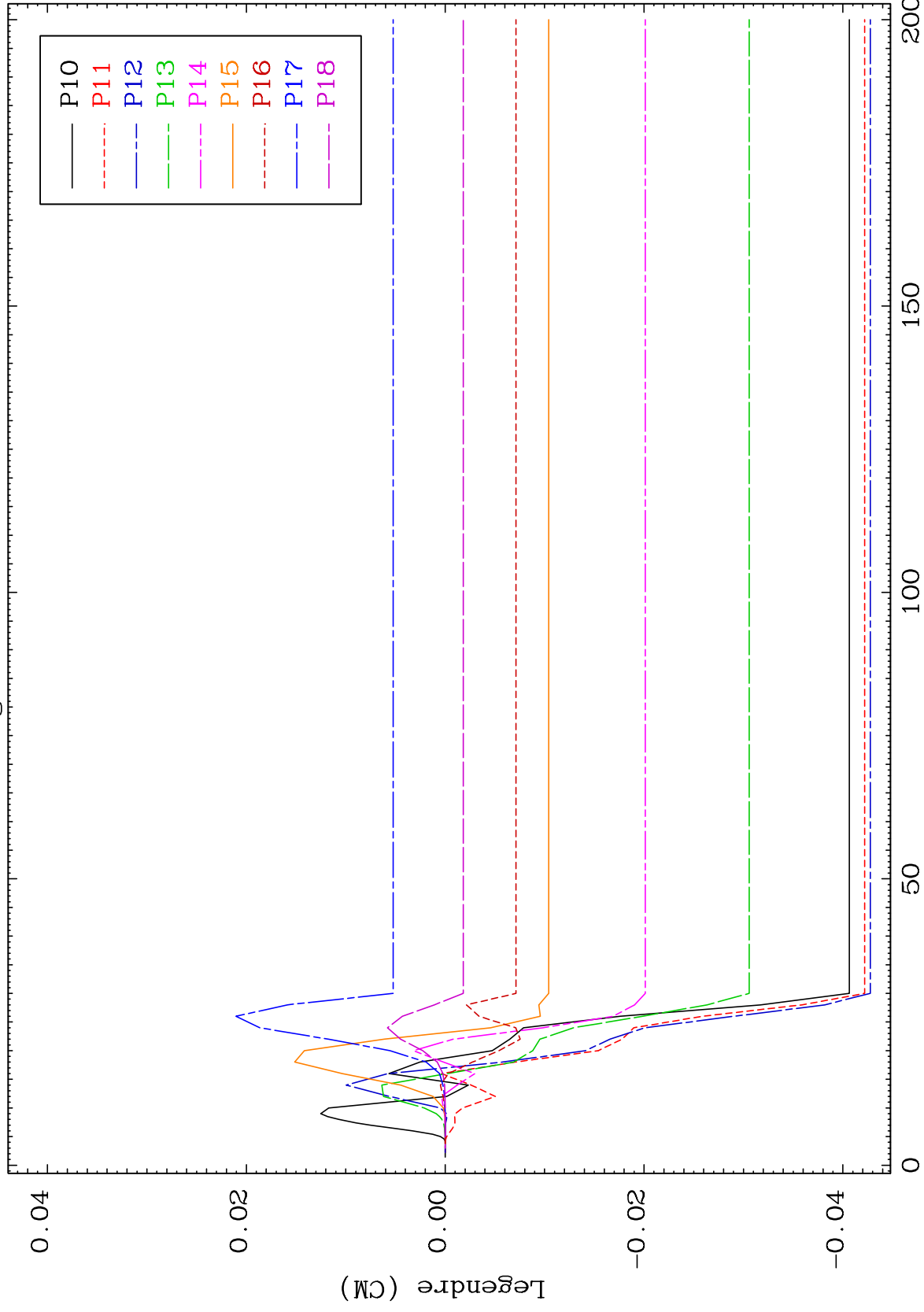
Incident Energy (MeV)

35

MAT 6431

MT= 55 (n,n') Level  
Legendre Coefficients

64-Gd-154



36

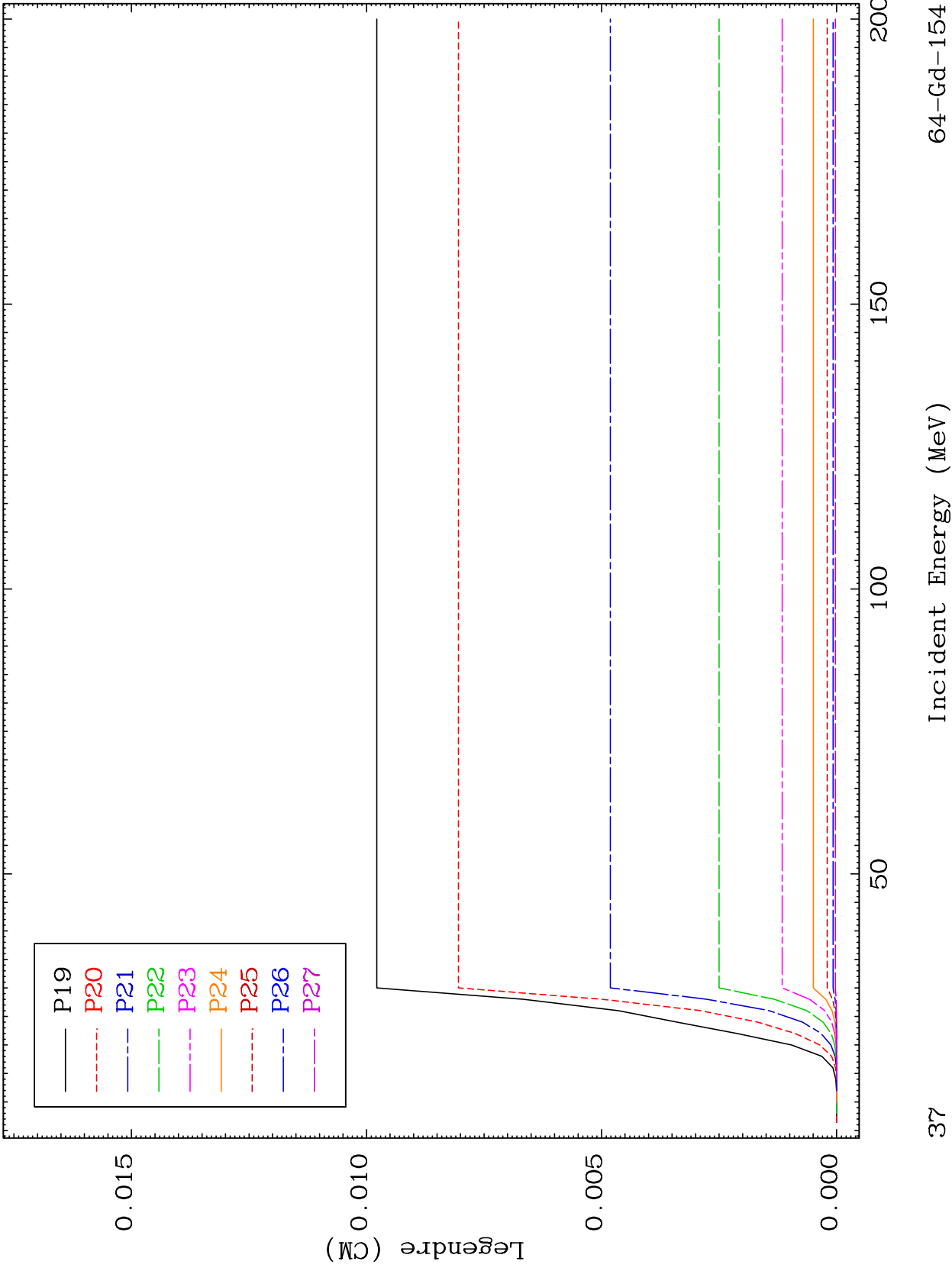
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 55 (n,n') Level  
Legendre Coefficients

64-Gd-154



37

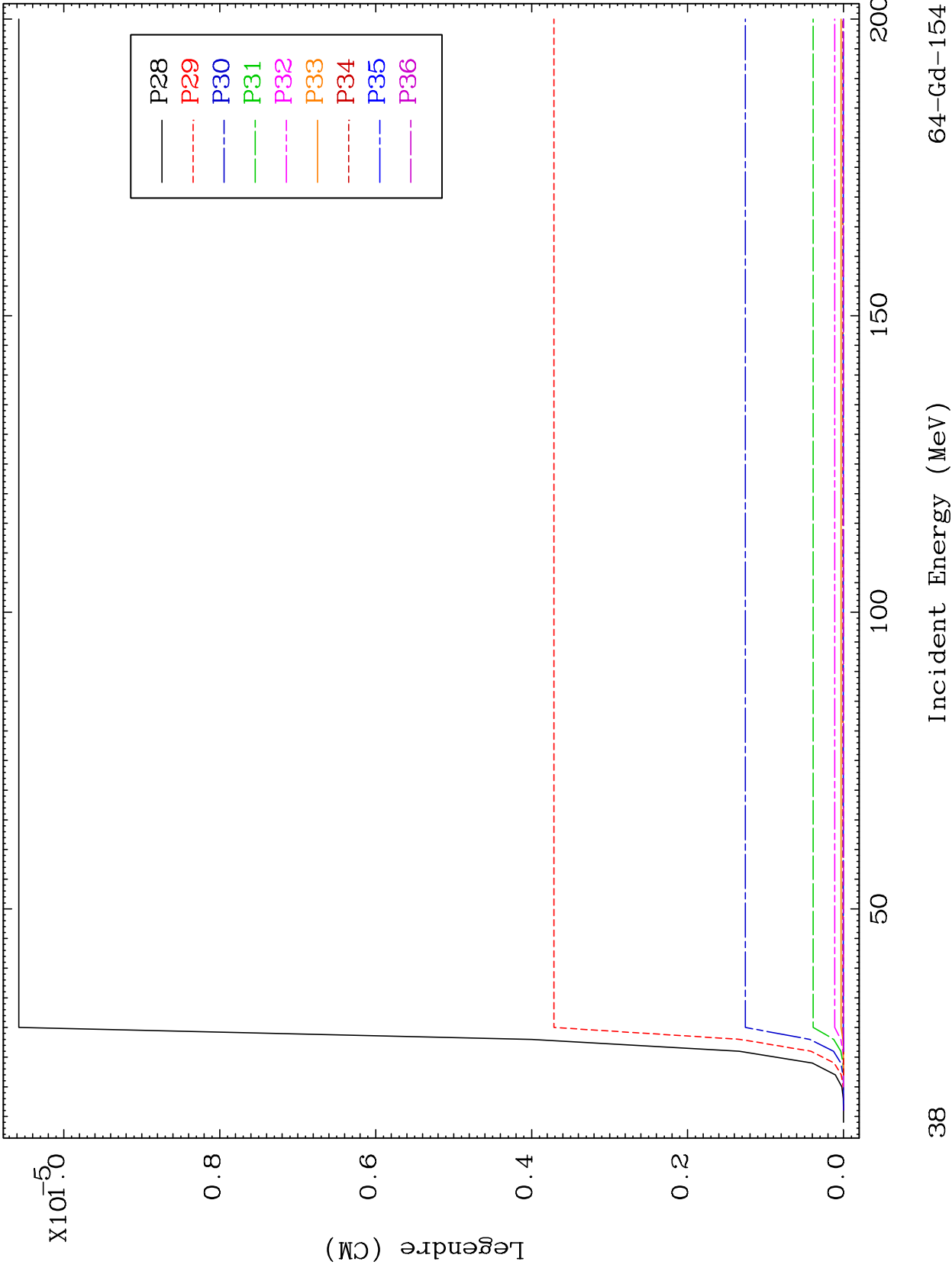
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 55 (n,n') Level  
Legendre Coefficients

64-Gd-154



38

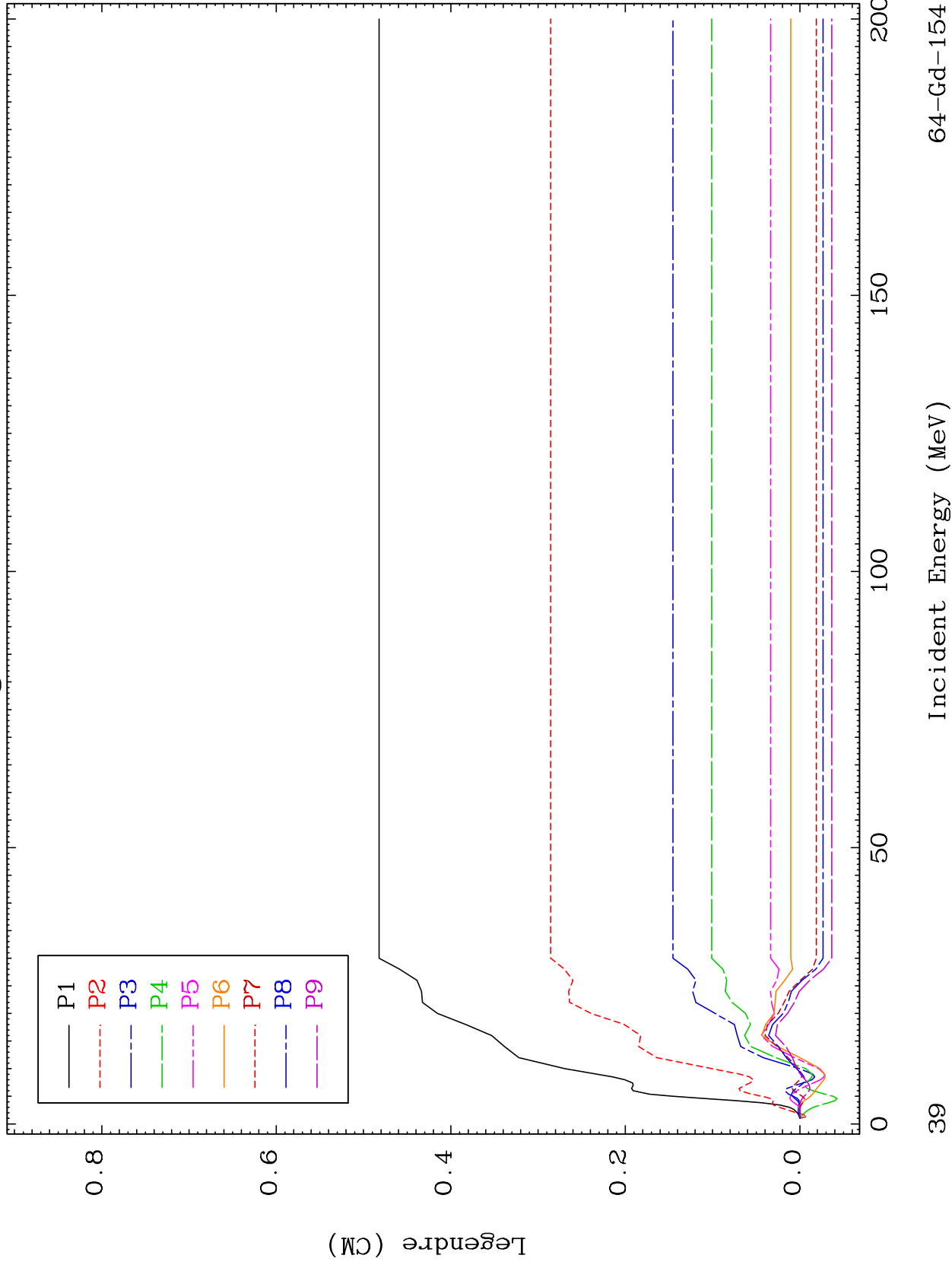
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 56 (n,n') Level  
Legendre Coefficients

64-Gd-154



39

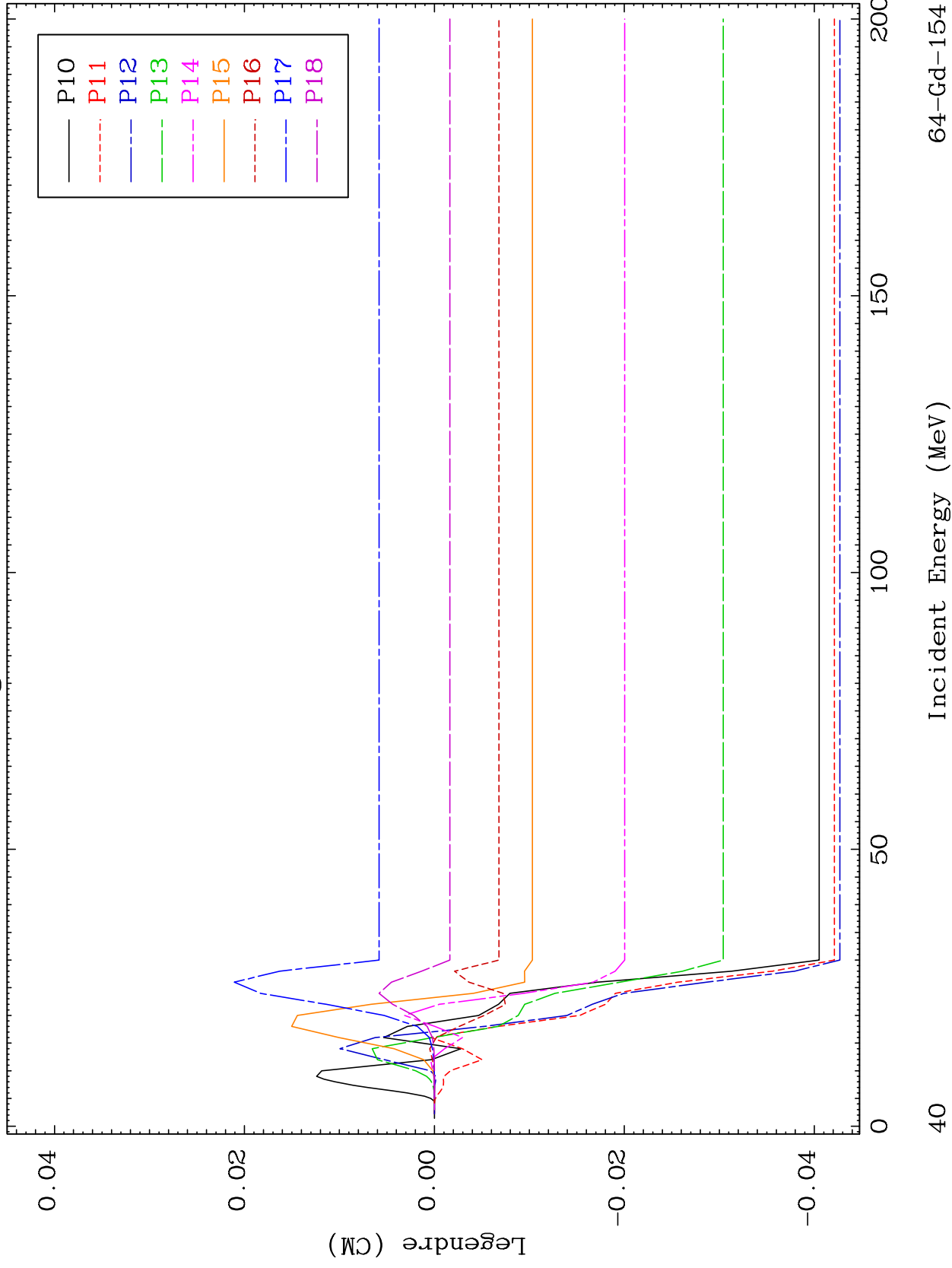
64-Gd-154



MAT 6431

MT= 56 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

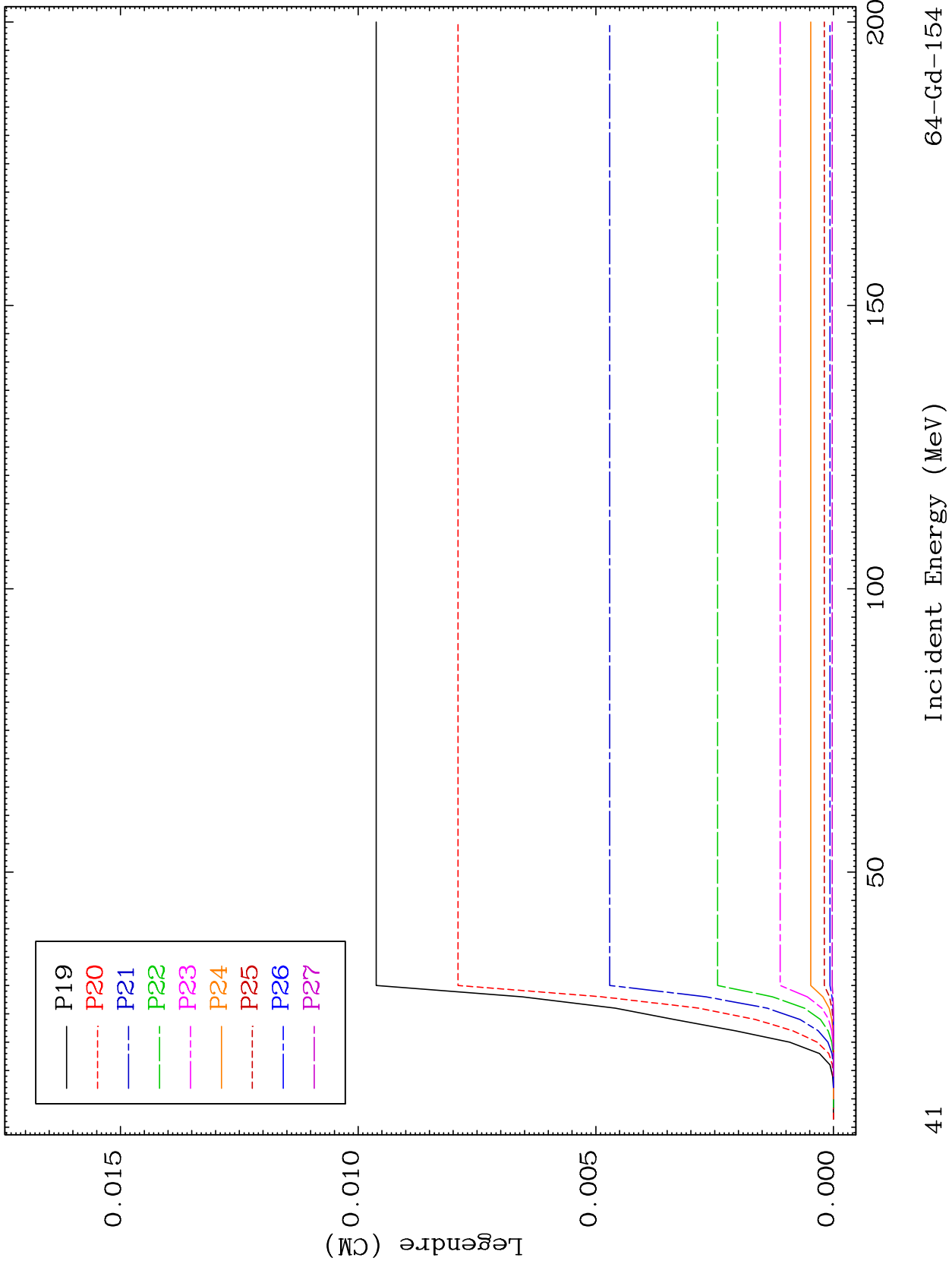
Incident Energy (MeV)

40

MAT 6431

MT= 56 (n,n') Level  
Legendre Coefficients

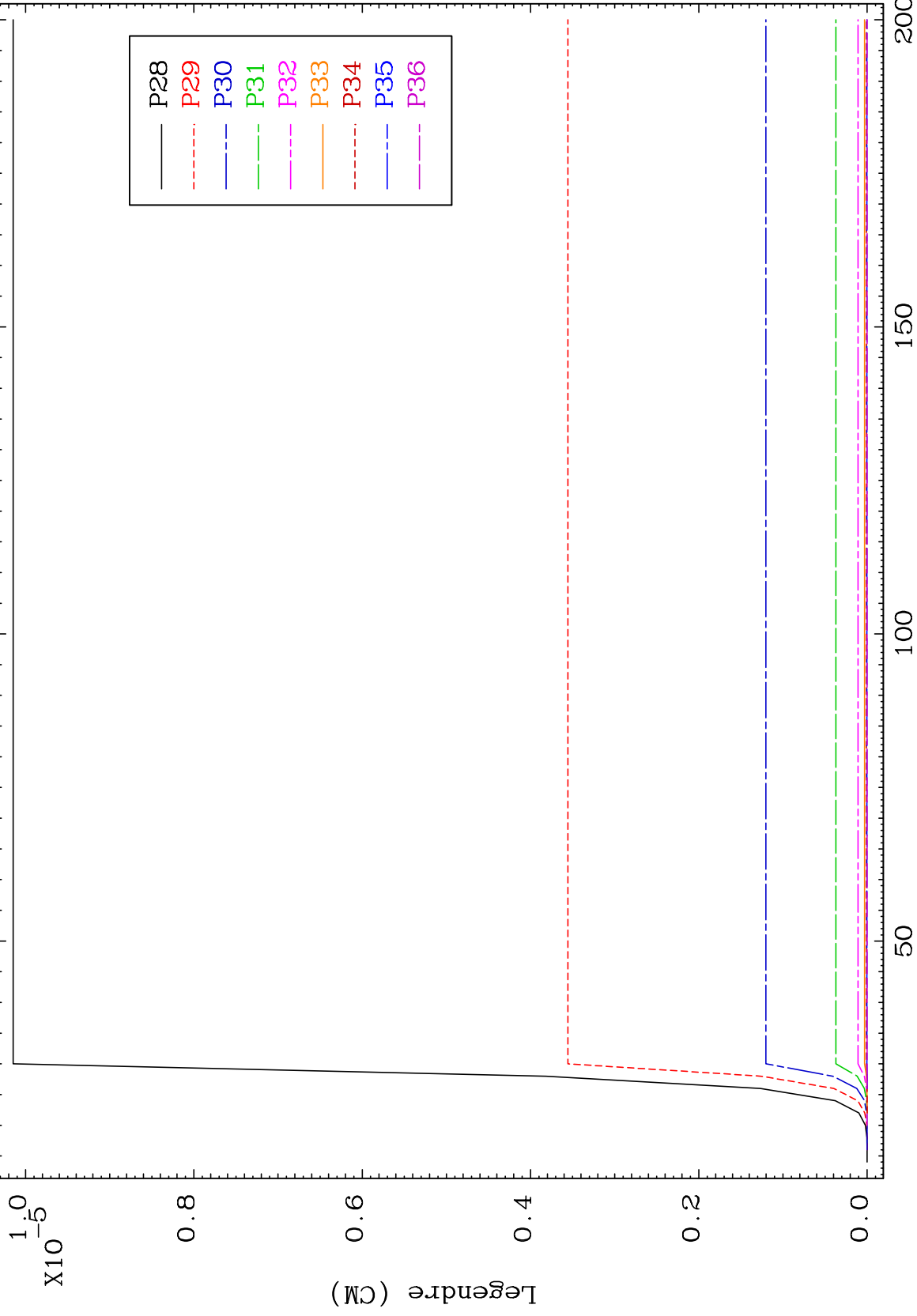
64-Gd-154



MAT 6431

MT= 56 (n,n') Level  
Legendre Coefficients

64-Gd-154



42

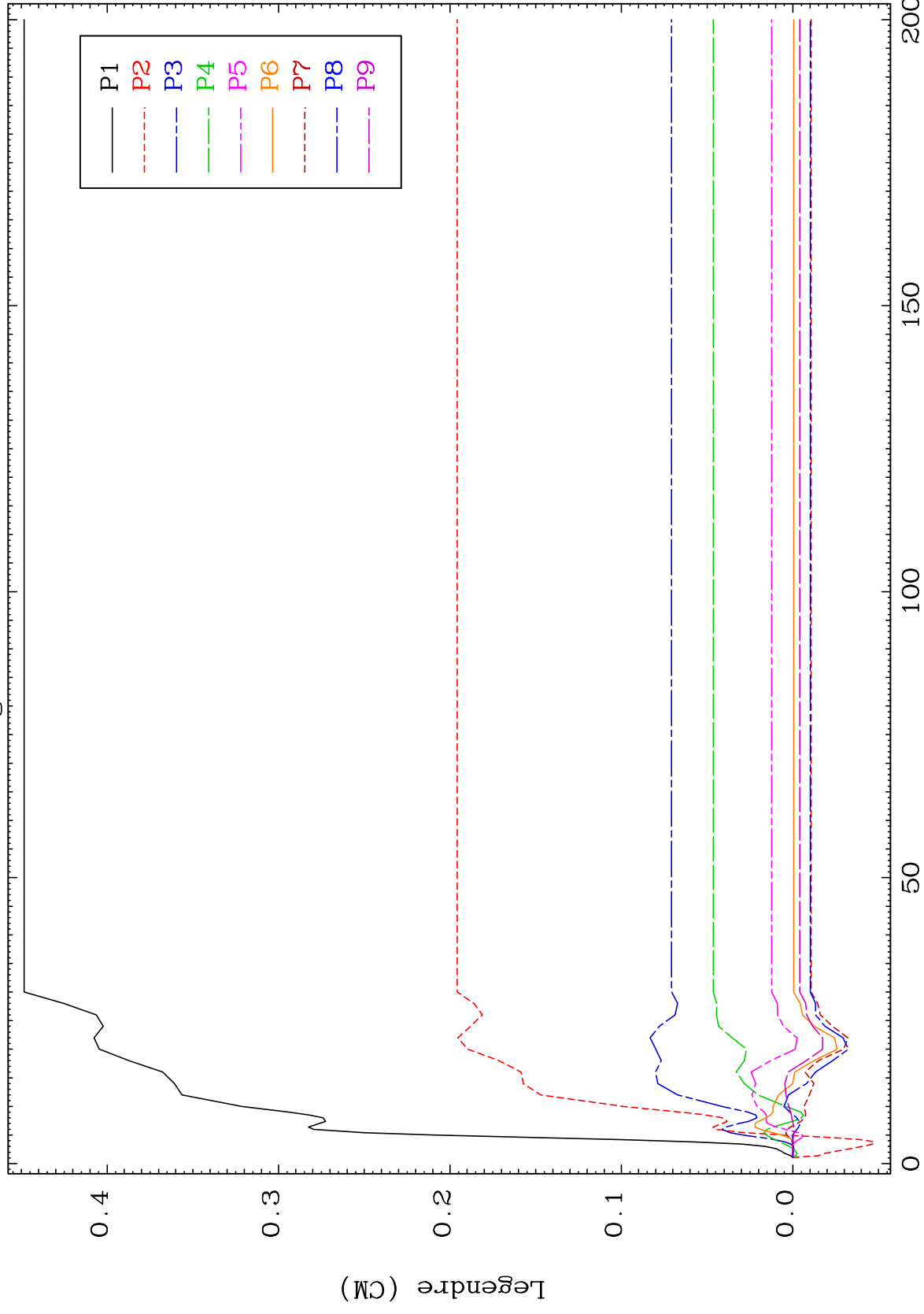
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 57 (n,n') Level  
Legendre Coefficients

64-Gd-154



43

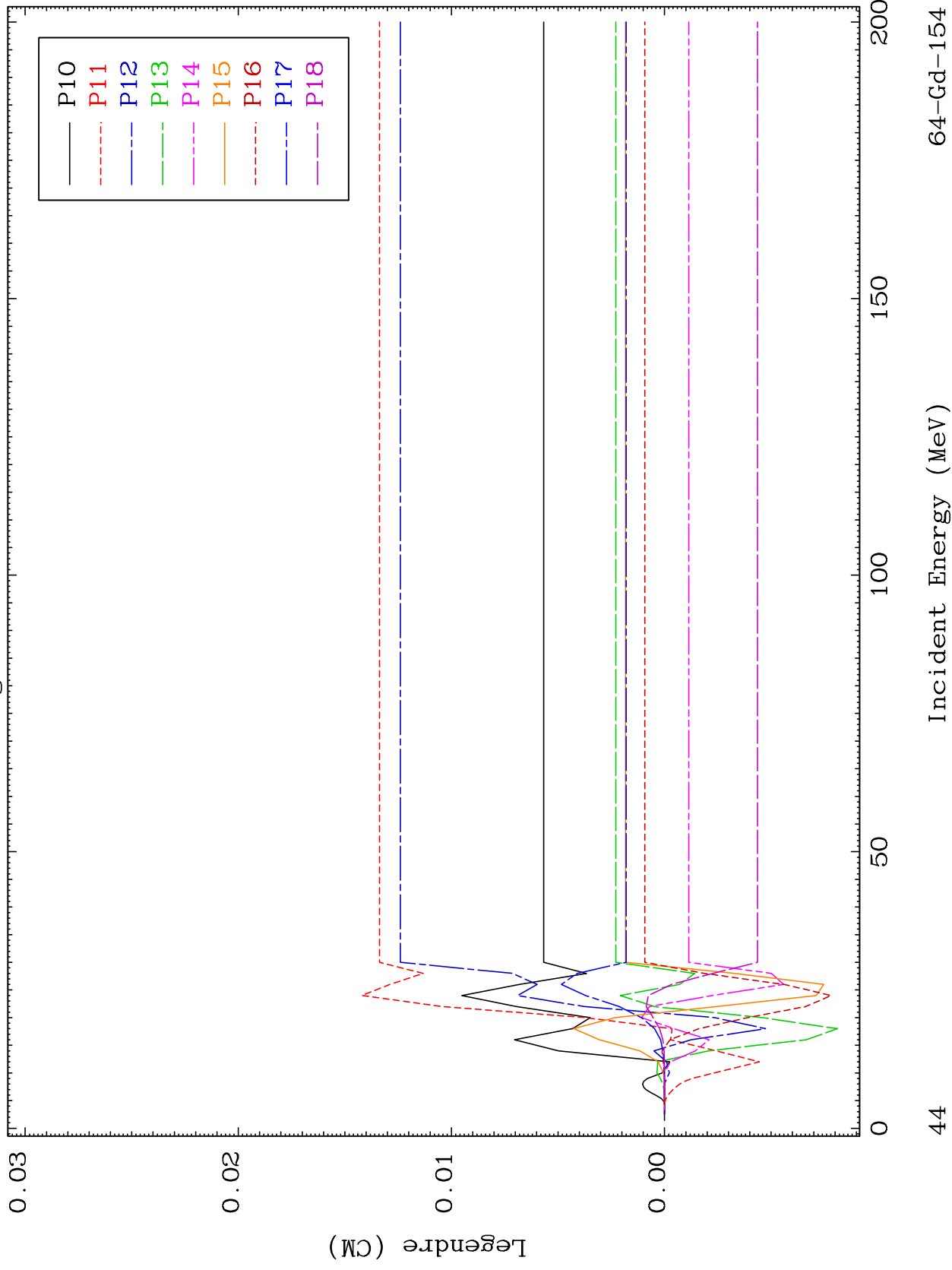
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 57 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

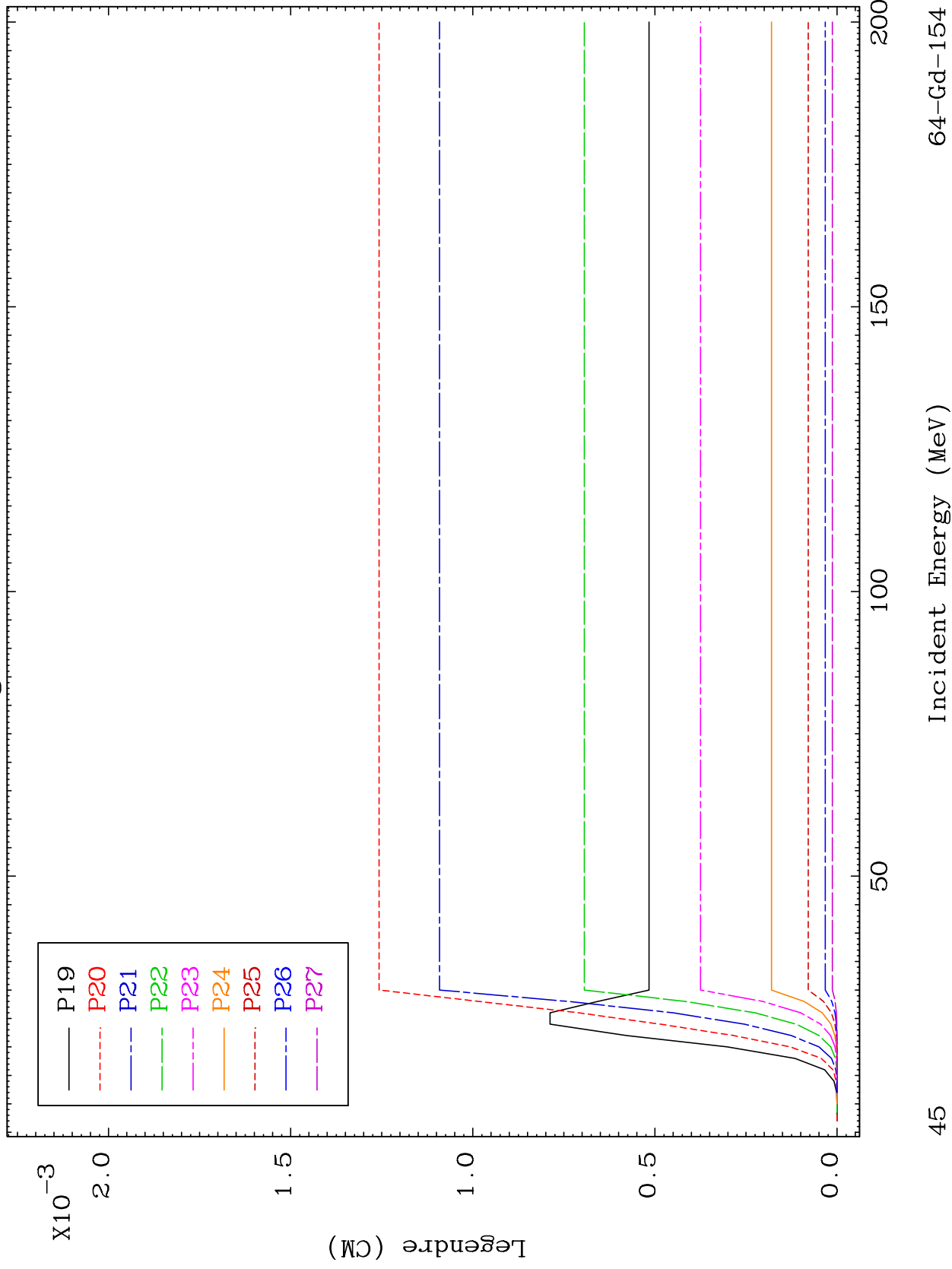
Incident Energy (MeV)

44

MAT 6431

MT= 57 (n,n') Level  
Legendre Coefficients

64-Gd-154



45

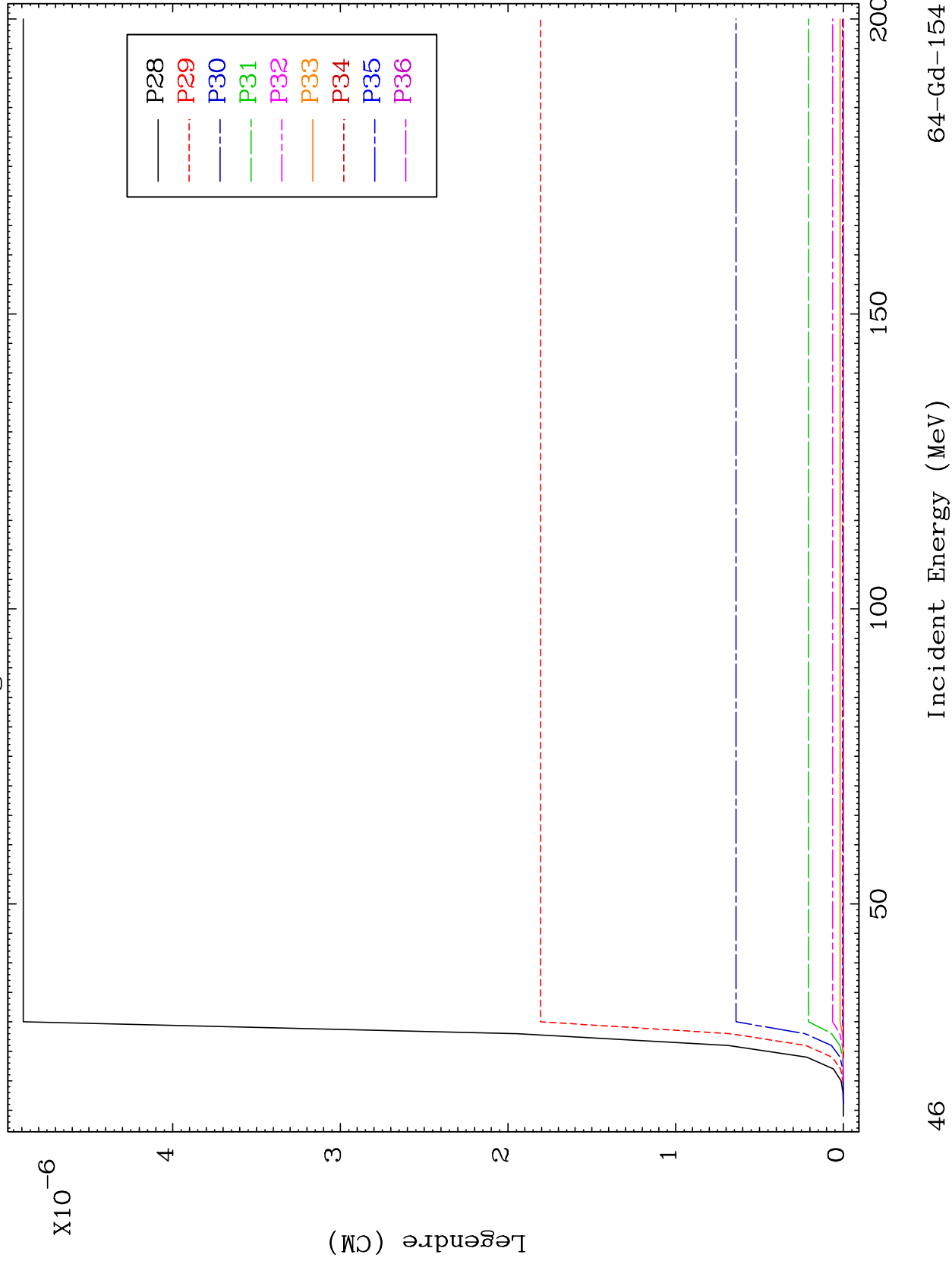
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 57 (n,n') Level  
Legendre Coefficients

64-Gd-154



46

Incident Energy (MeV)

64-Gd-154



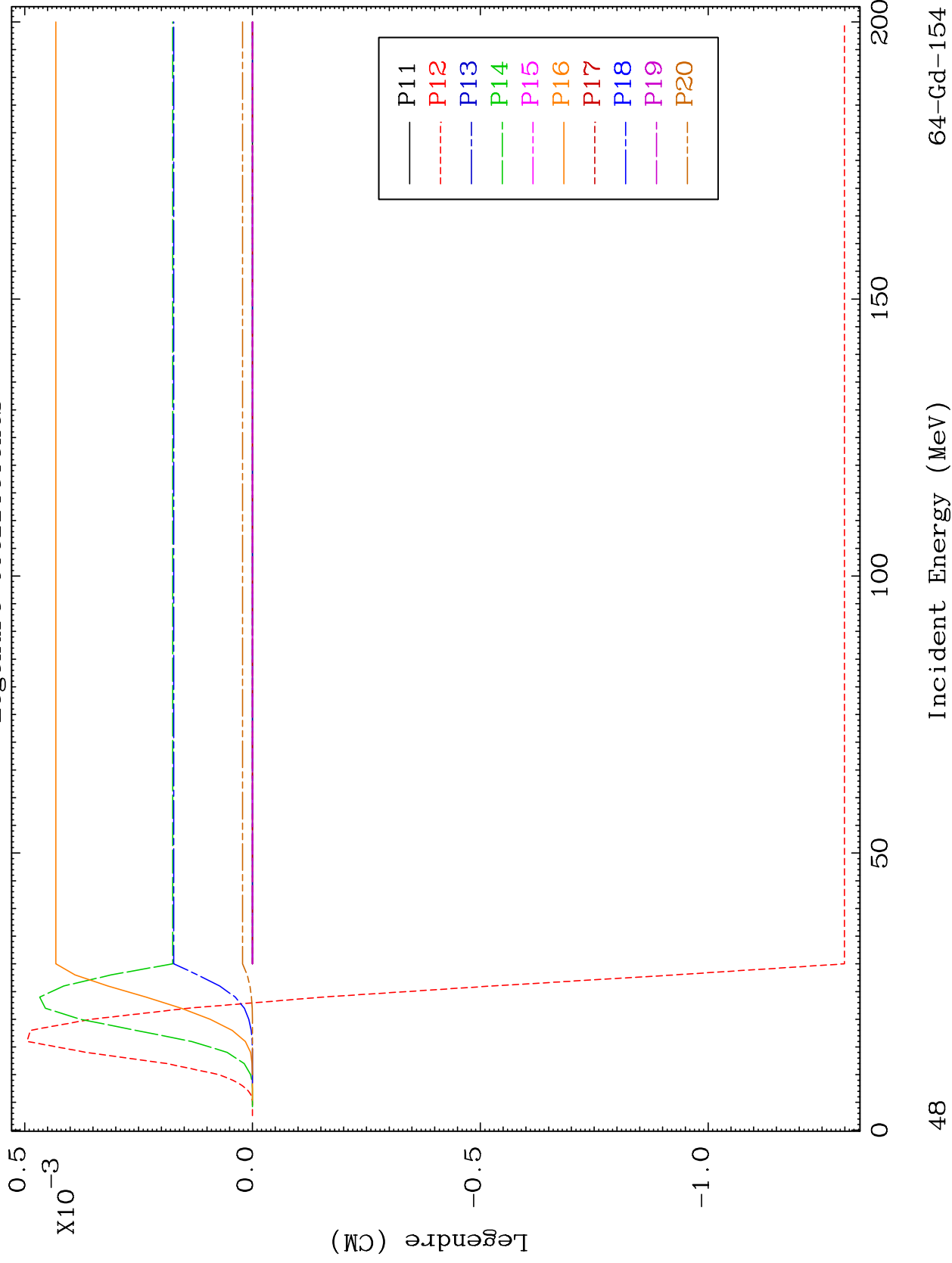


MAT 6431

MT= 58 (n,n') Level

64-Gd-154

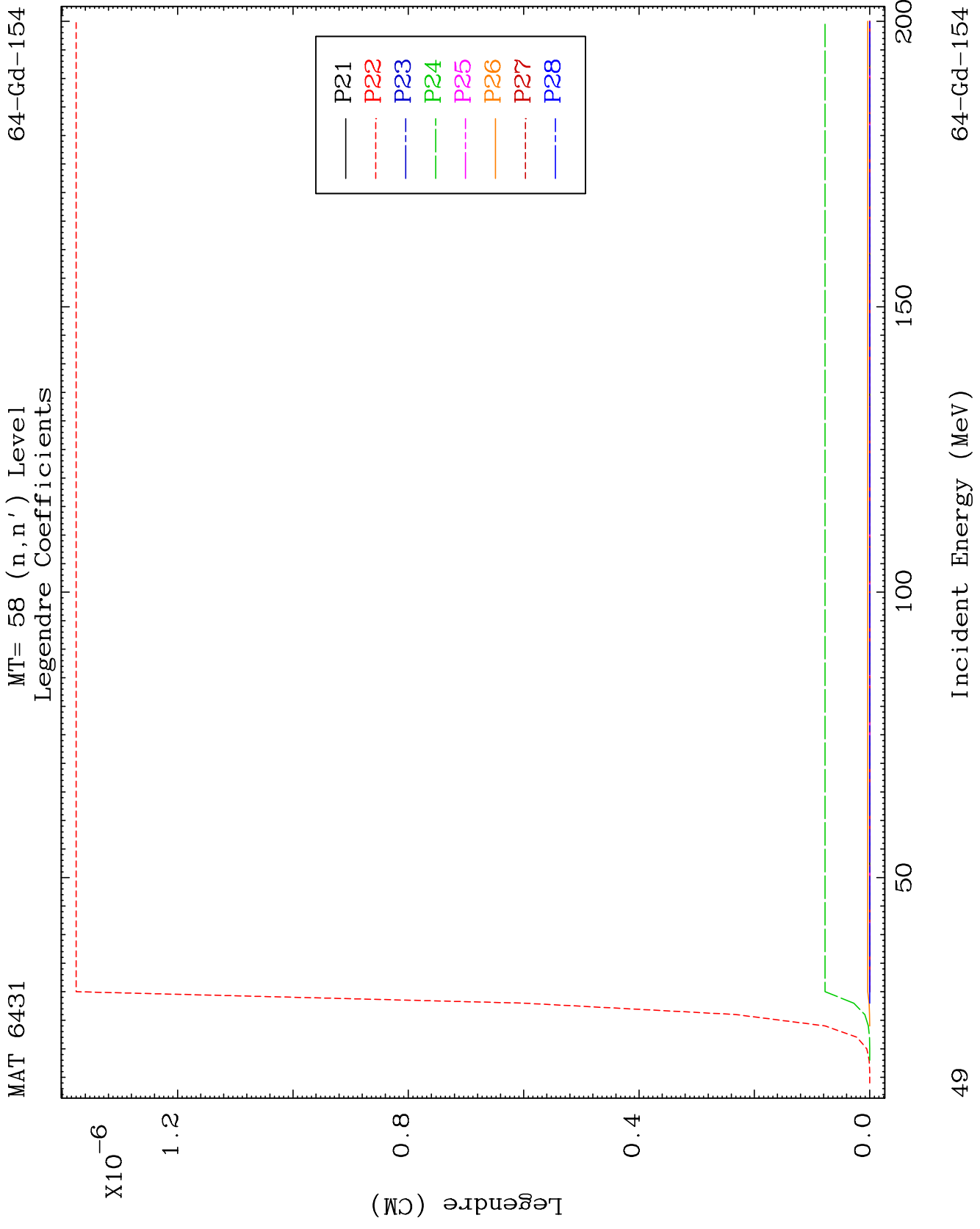
Legendre Coefficients



48

64-Gd-154

64-Gd-154

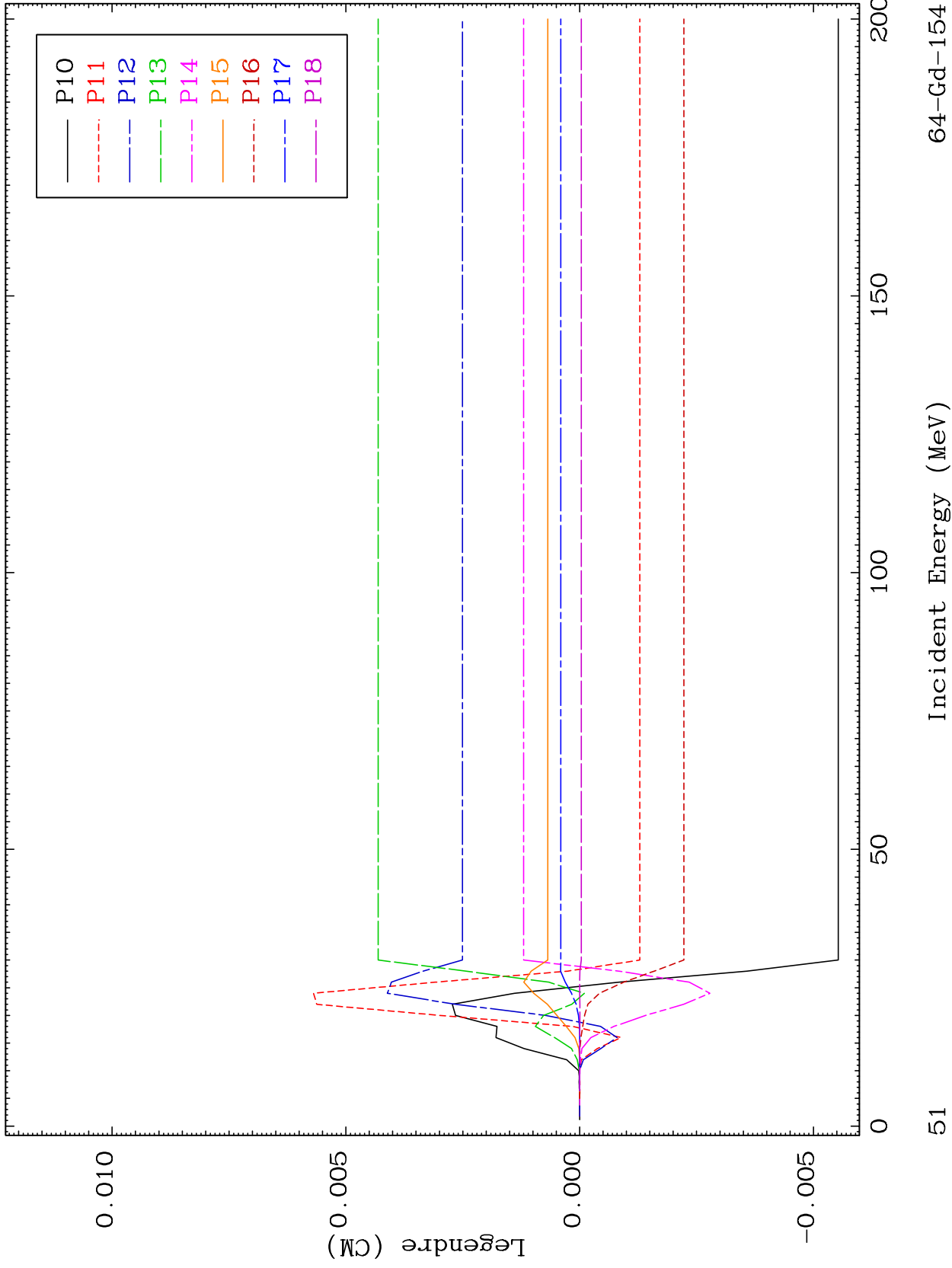




MAT 6431

MT= 59 (n,n') Level  
Legendre Coefficients

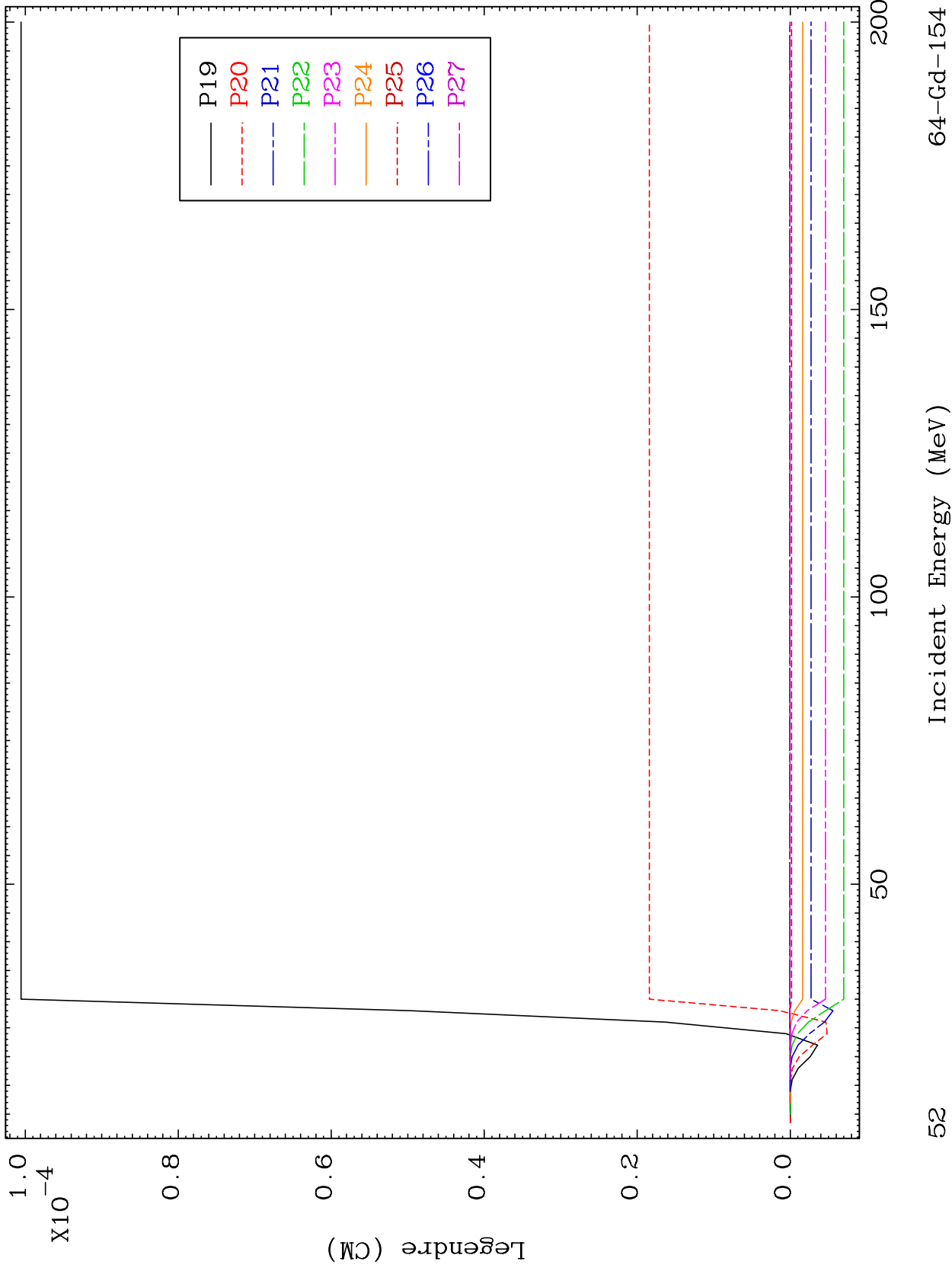
64-Gd-154



51

Incident Energy (MeV)

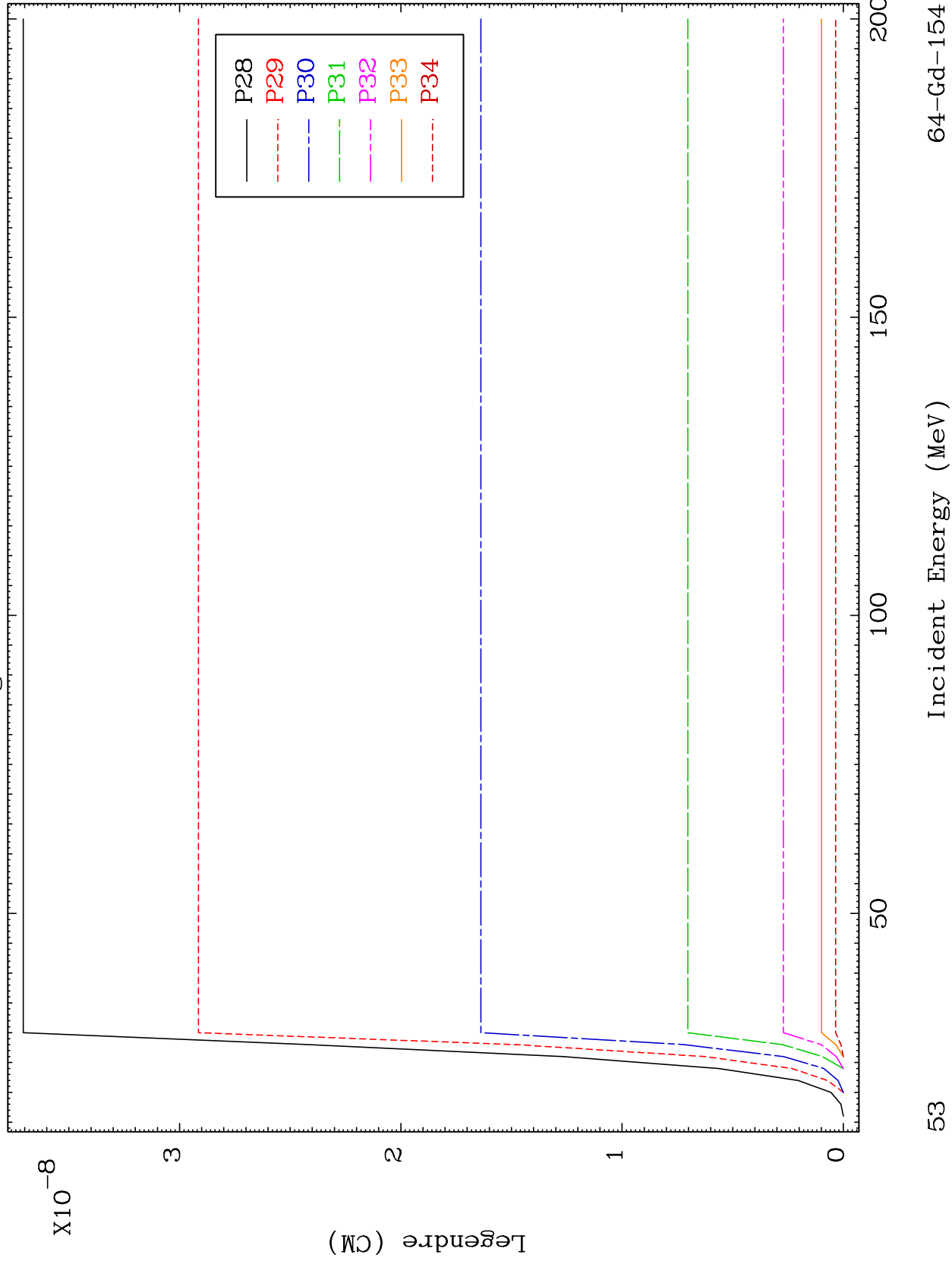
64-Gd-154



MAT 6431

MT= 59 (n,n') Level  
Legendre Coefficients

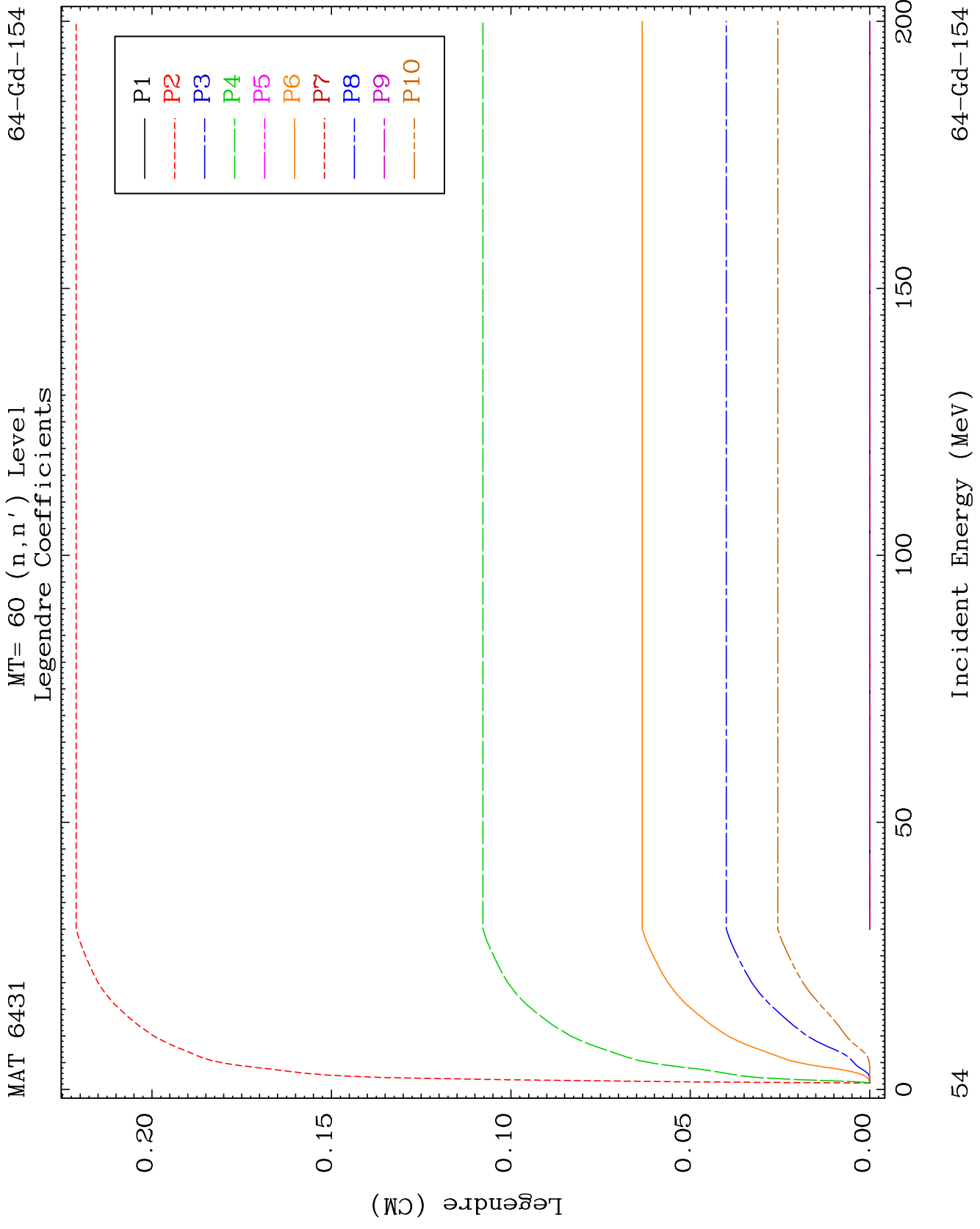
64-Gd-154



64-Gd-154

Incident Energy (MeV)

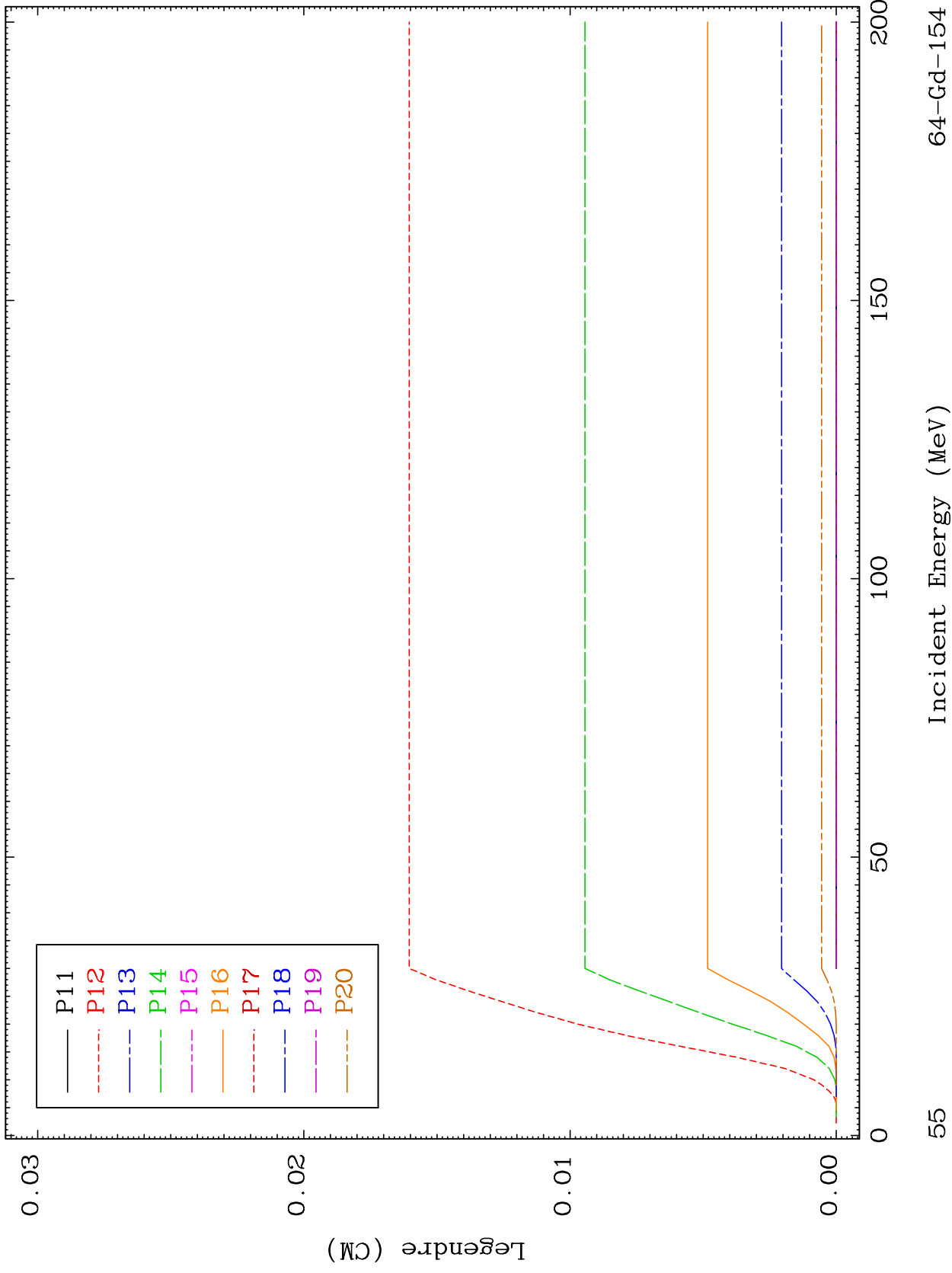
53



MAT 6431

MT= 60 (n,n') Level  
Legendre Coefficients

64-Gd-154

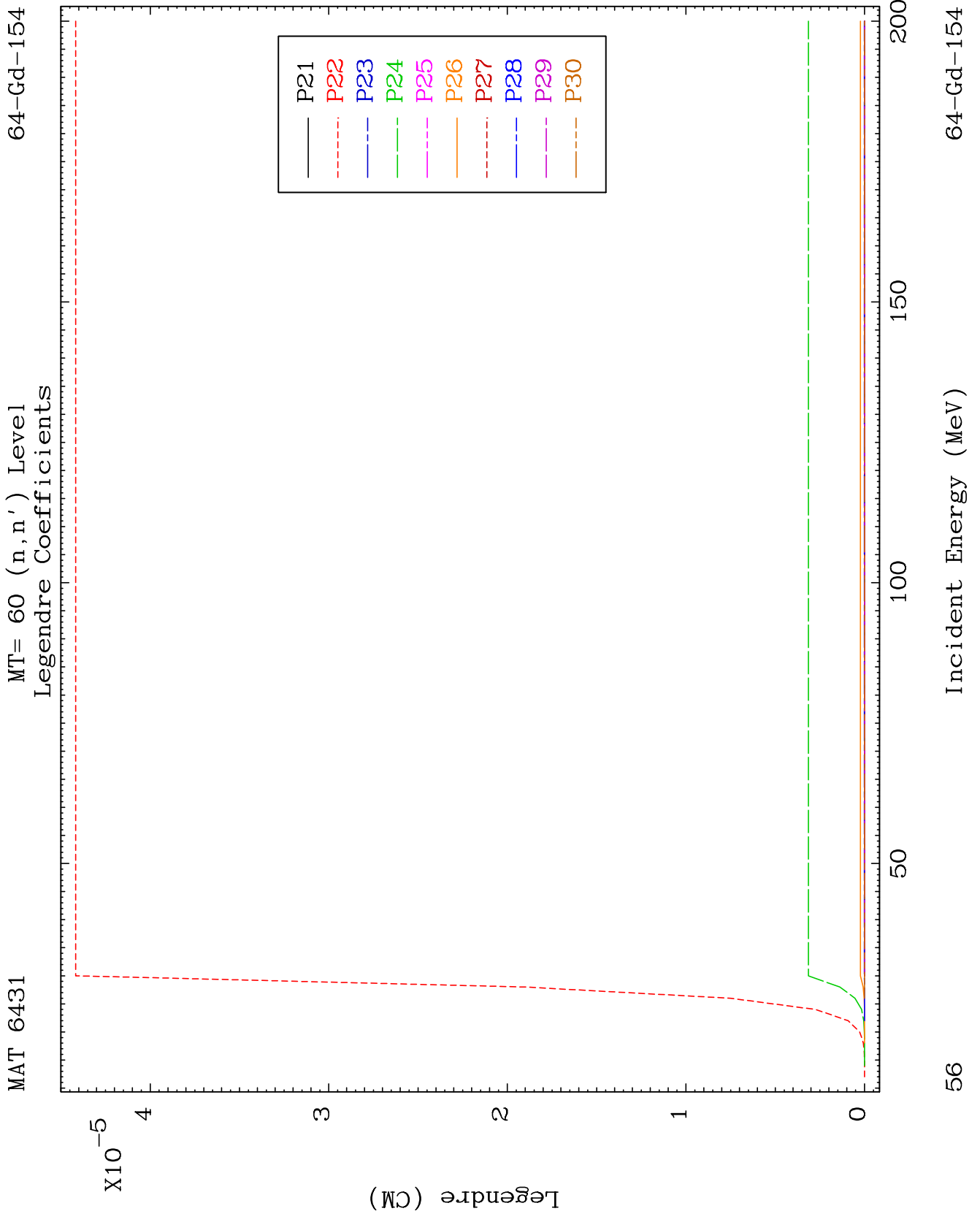


64-Gd-154

Incident Energy (MeV)

55

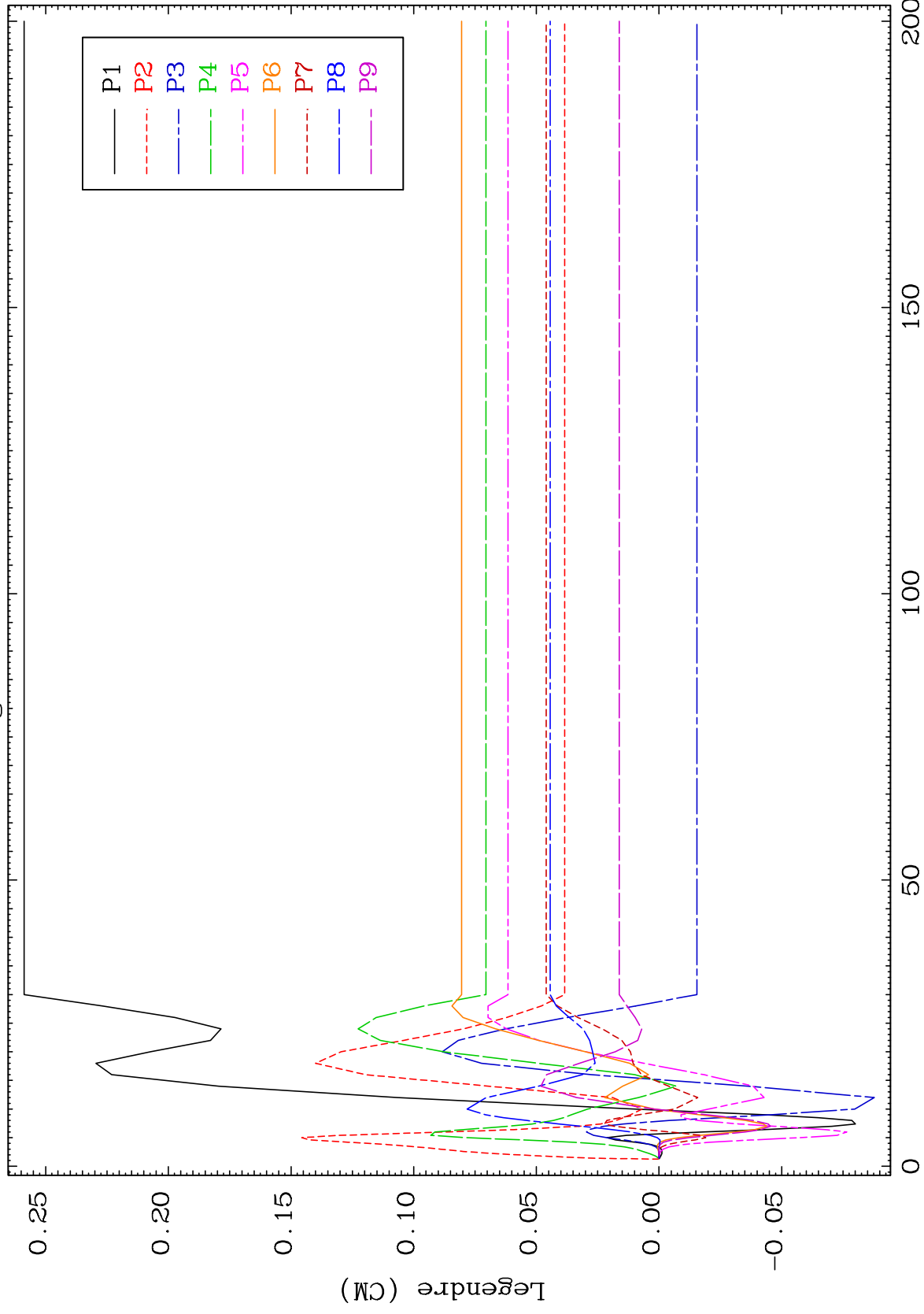




MAT 6431

MT= 61 (n,n') Level  
Legendre Coefficients

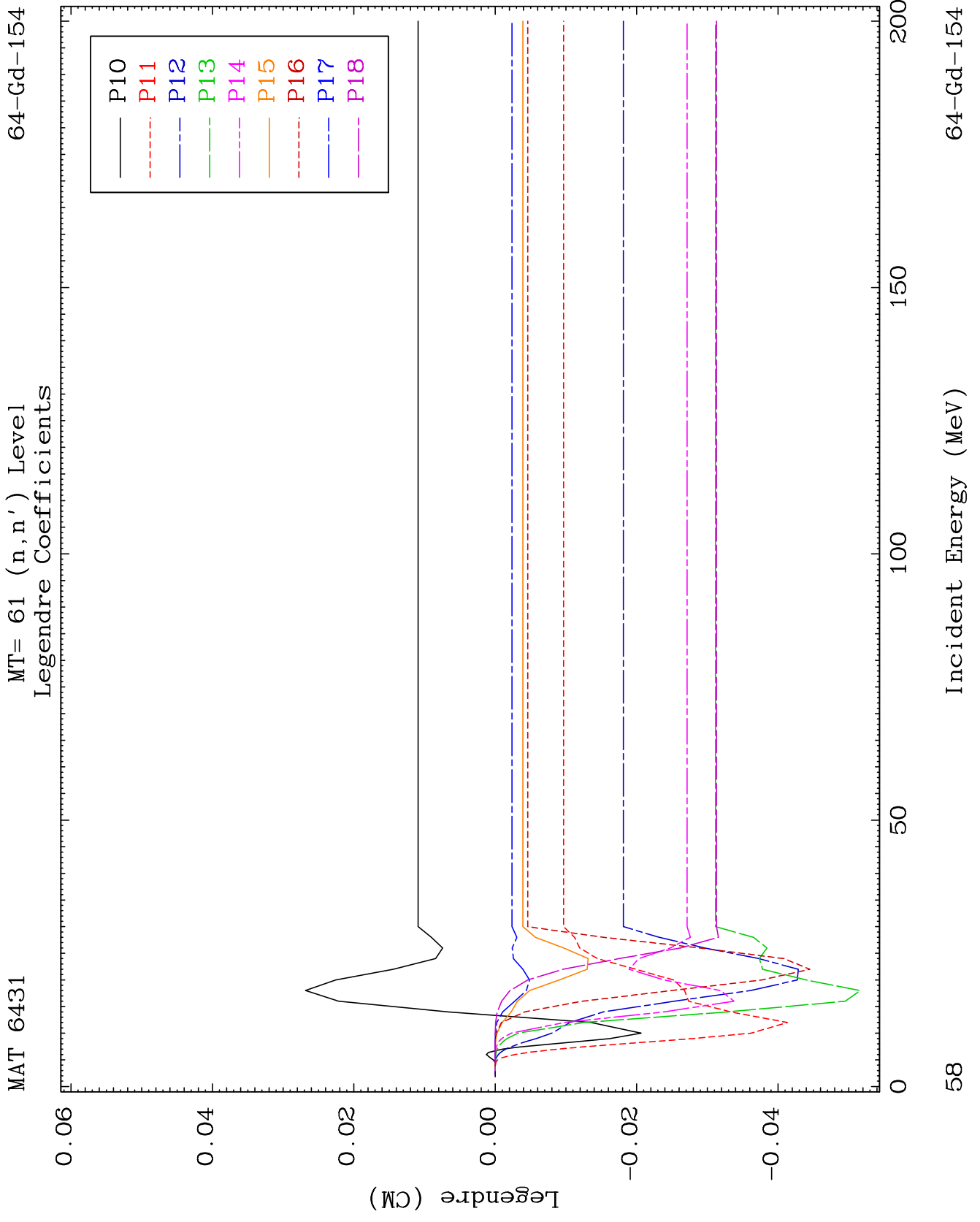
64-Gd-154



57

Incident Energy (MeV)

64-Gd-154



64-Gd-154

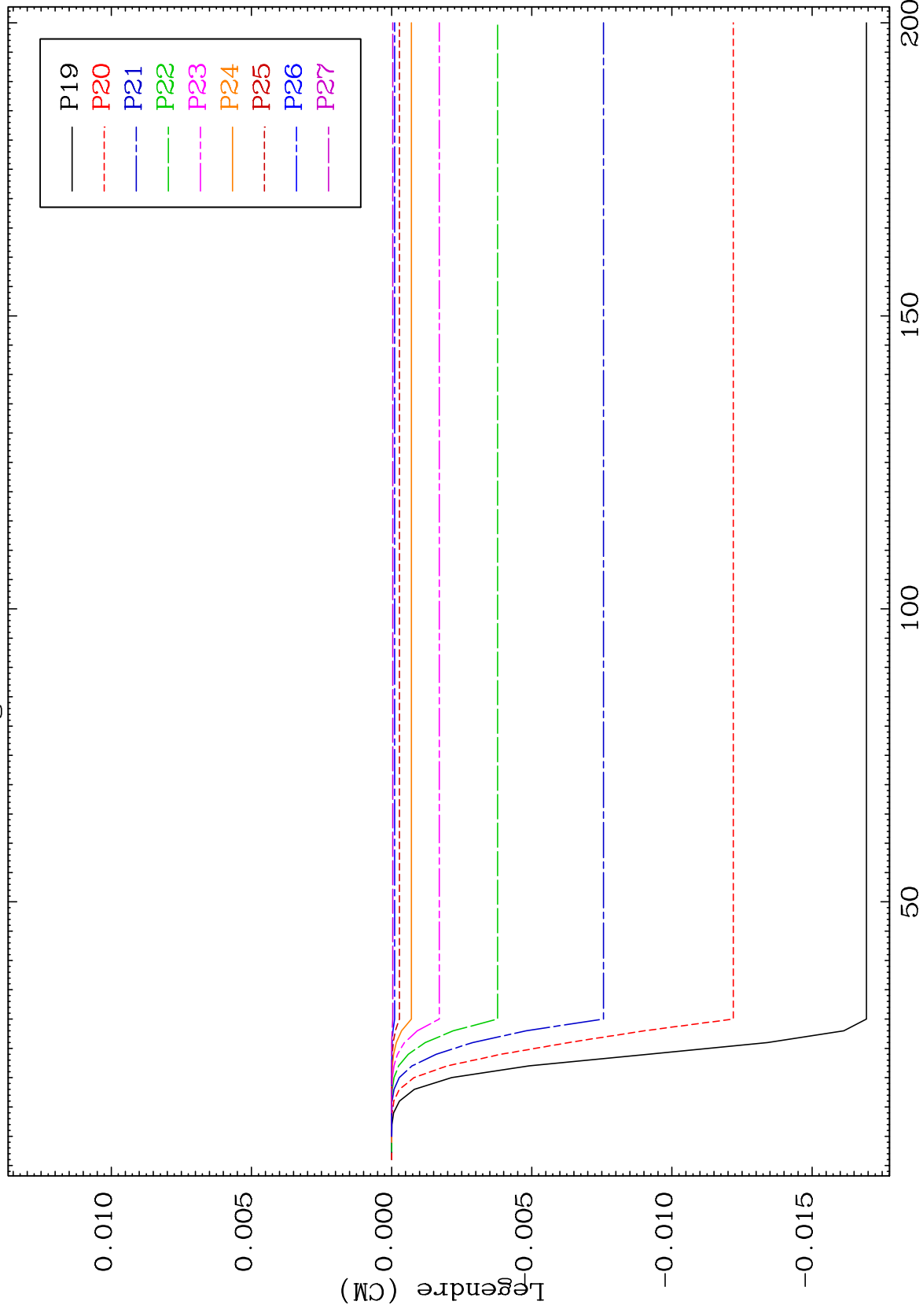
Incident Energy (MeV)

58

MAT 6431

MT= 61 (n,n') Level  
Legendre Coefficients

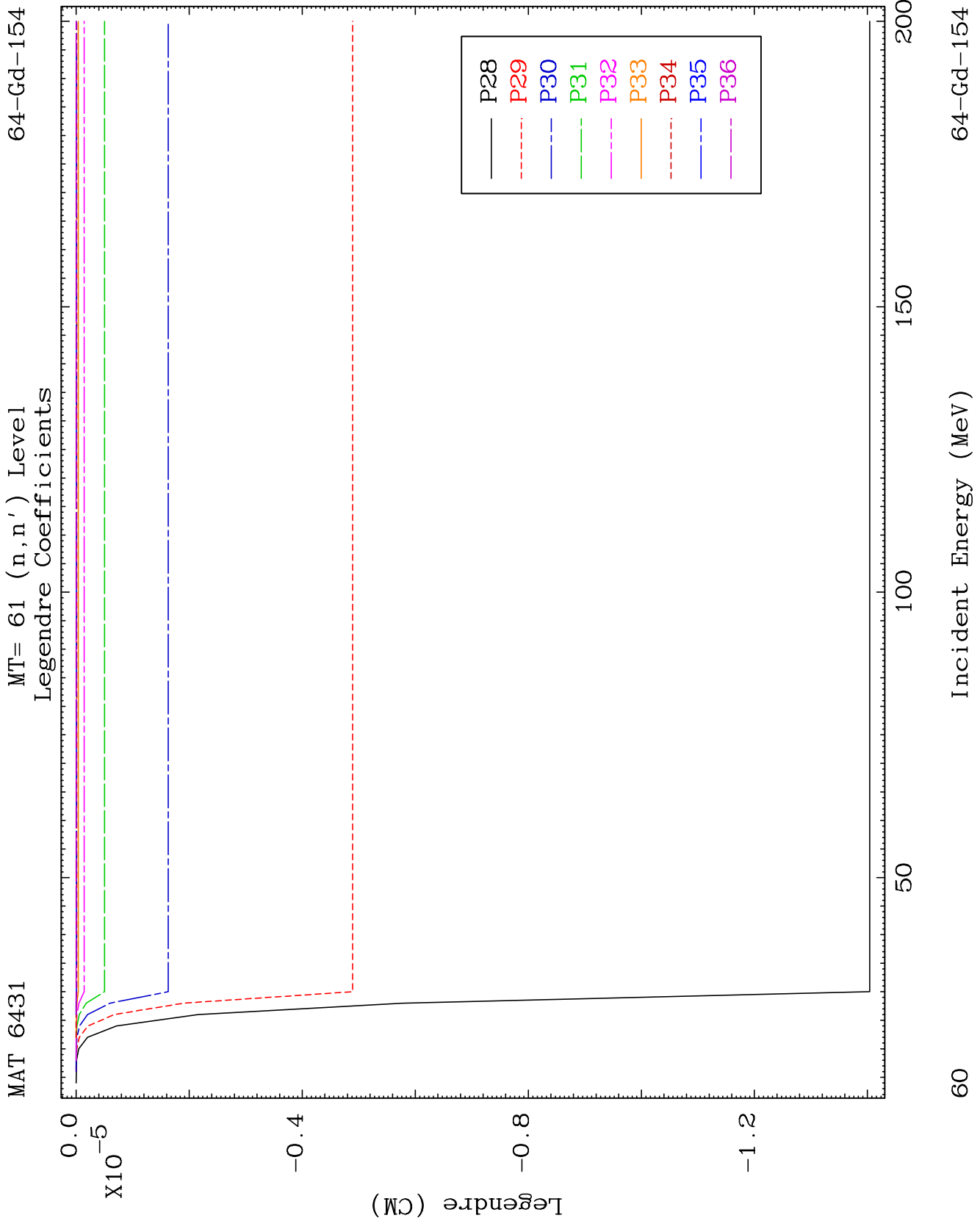
64-Gd-154



59

Incident Energy (MeV)

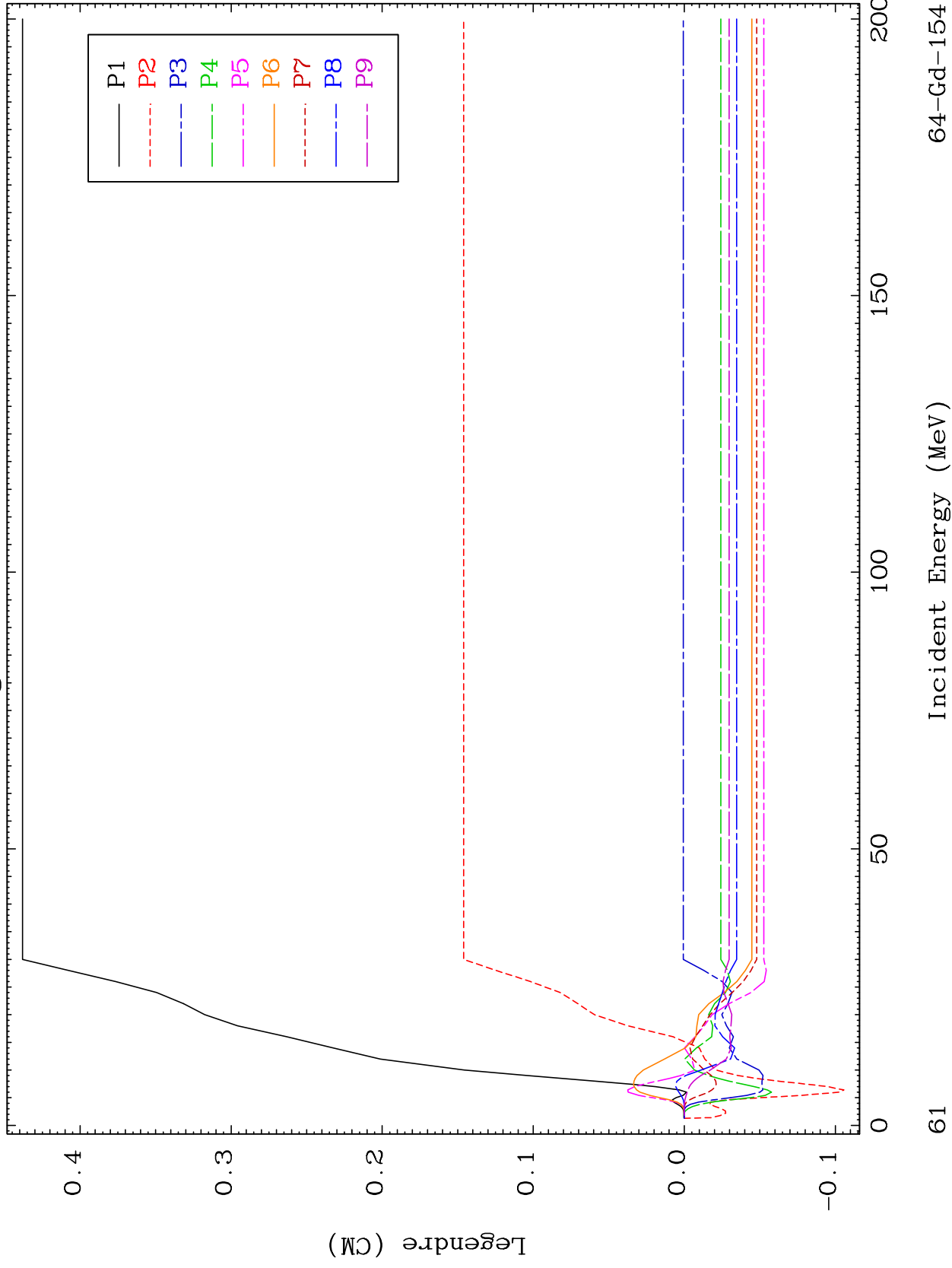
64-Gd-154



MAT 6431

MT= 62 (n,n') Level  
Legendre Coefficients

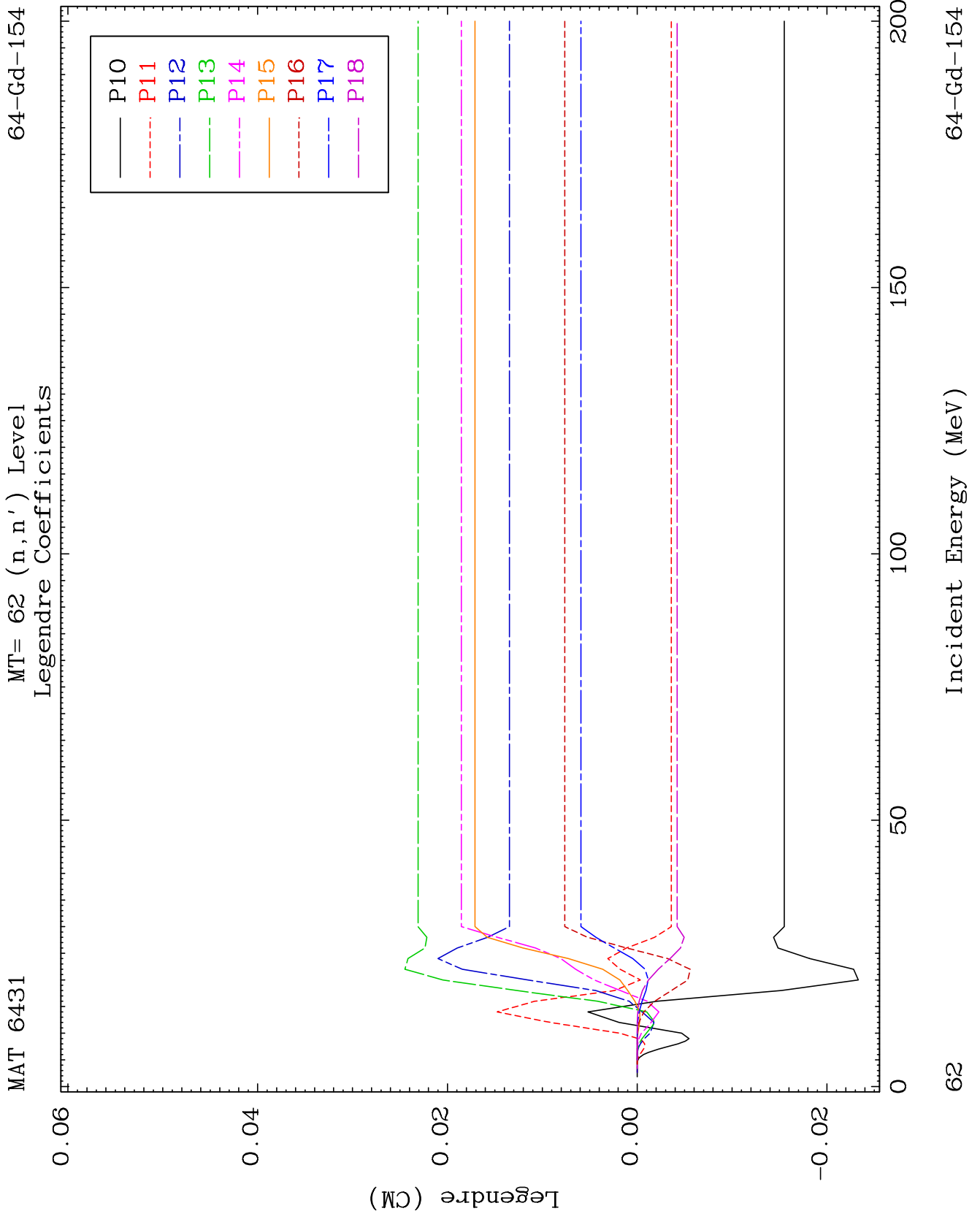
64-Gd-154



64-Gd-154

Incident Energy (MeV)

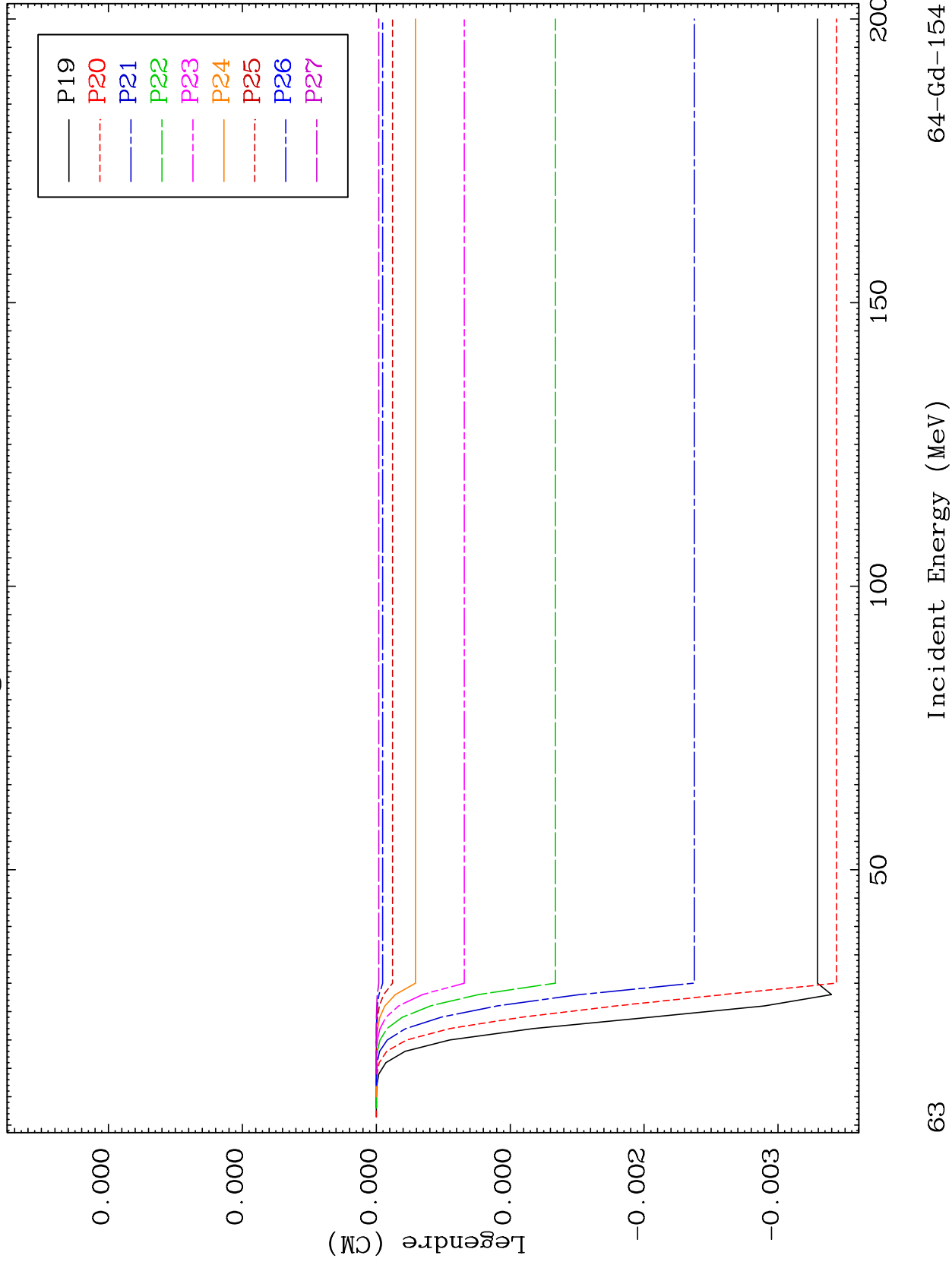
61



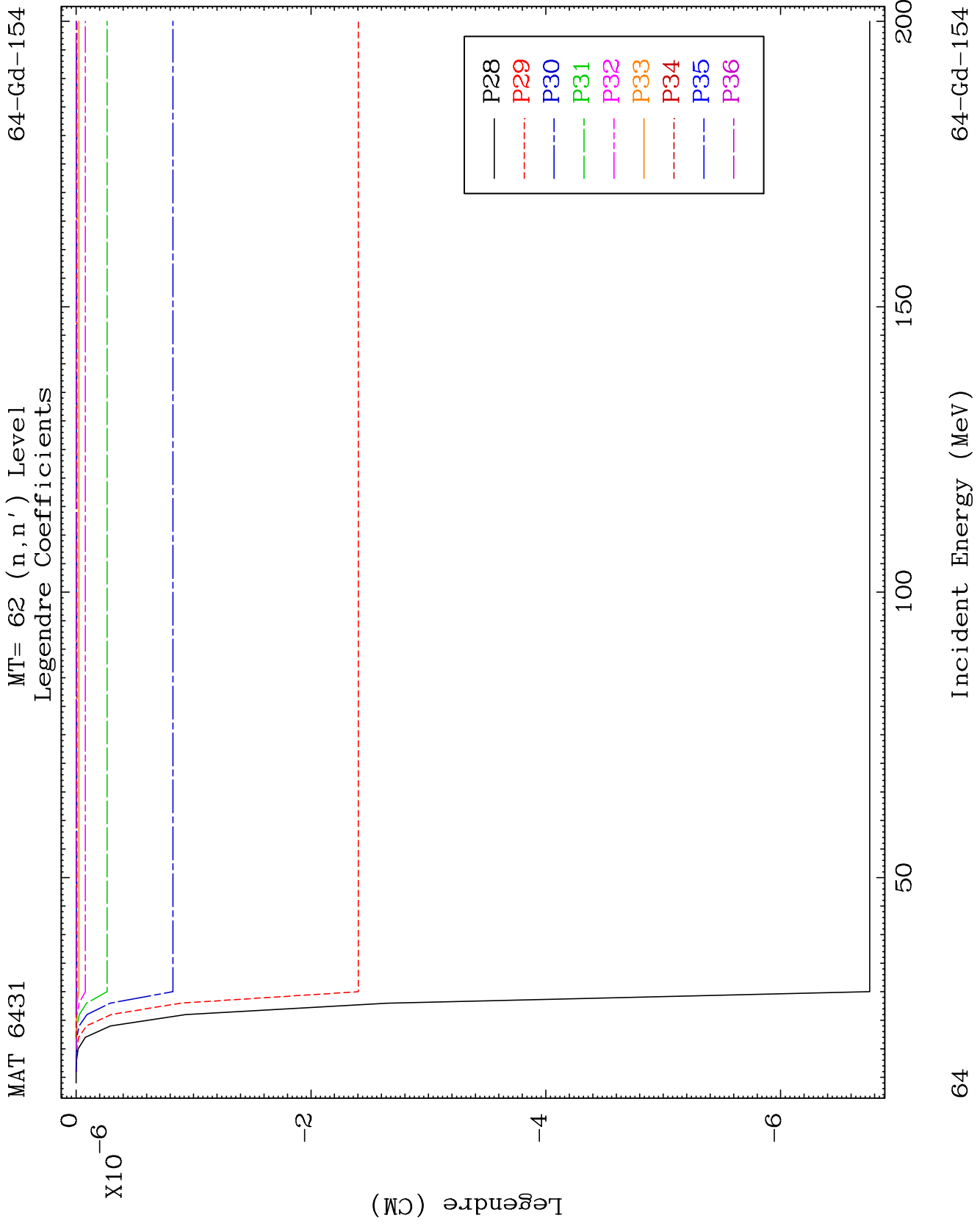
MAT 6431

MT= 62 (n,n') Level  
Legendre Coefficients

64-Gd-154



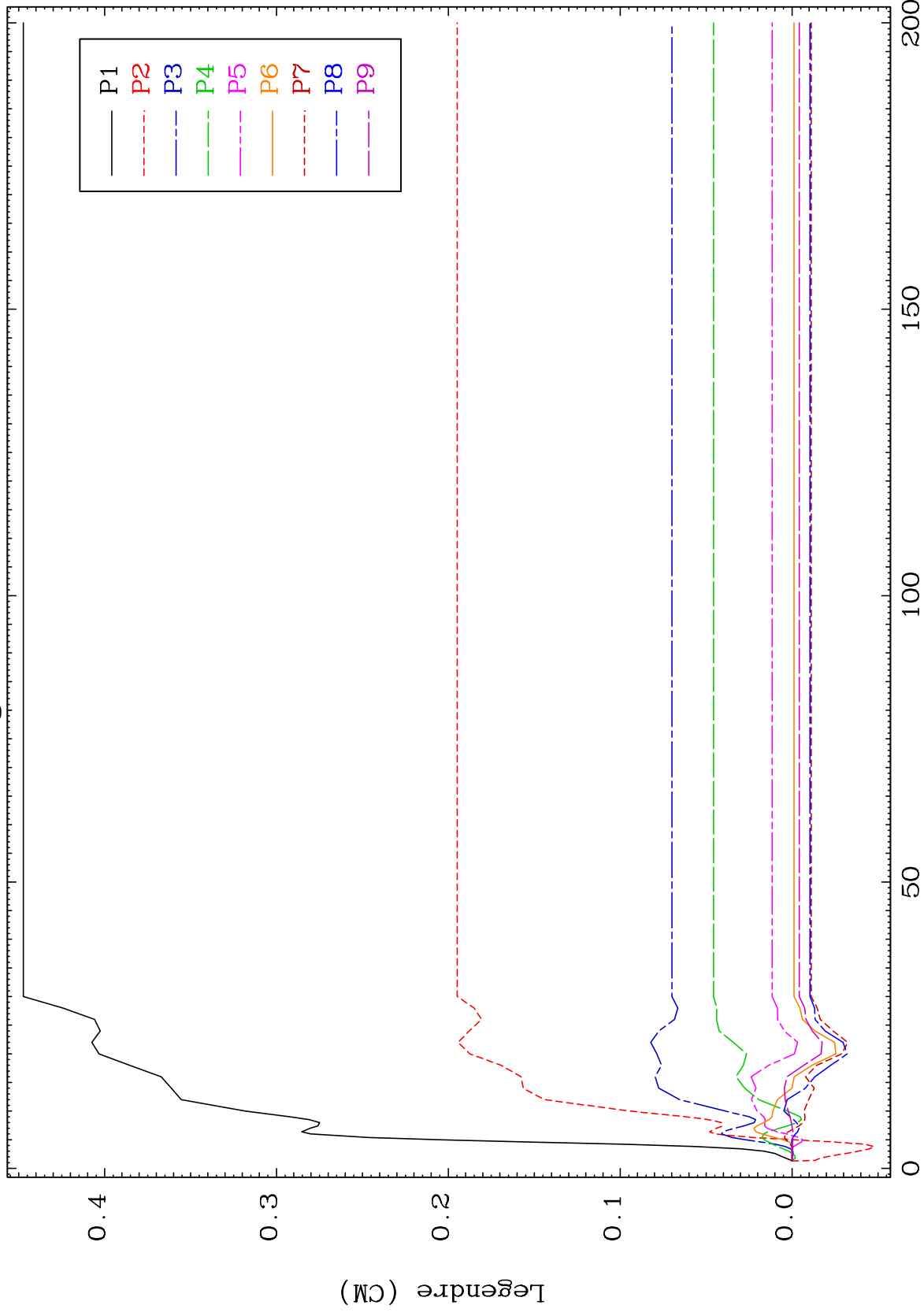




MAT 6431

MT= 63 (n,n') Level  
Legendre Coefficients

64-Gd-154



65

Incident Energy (MeV)

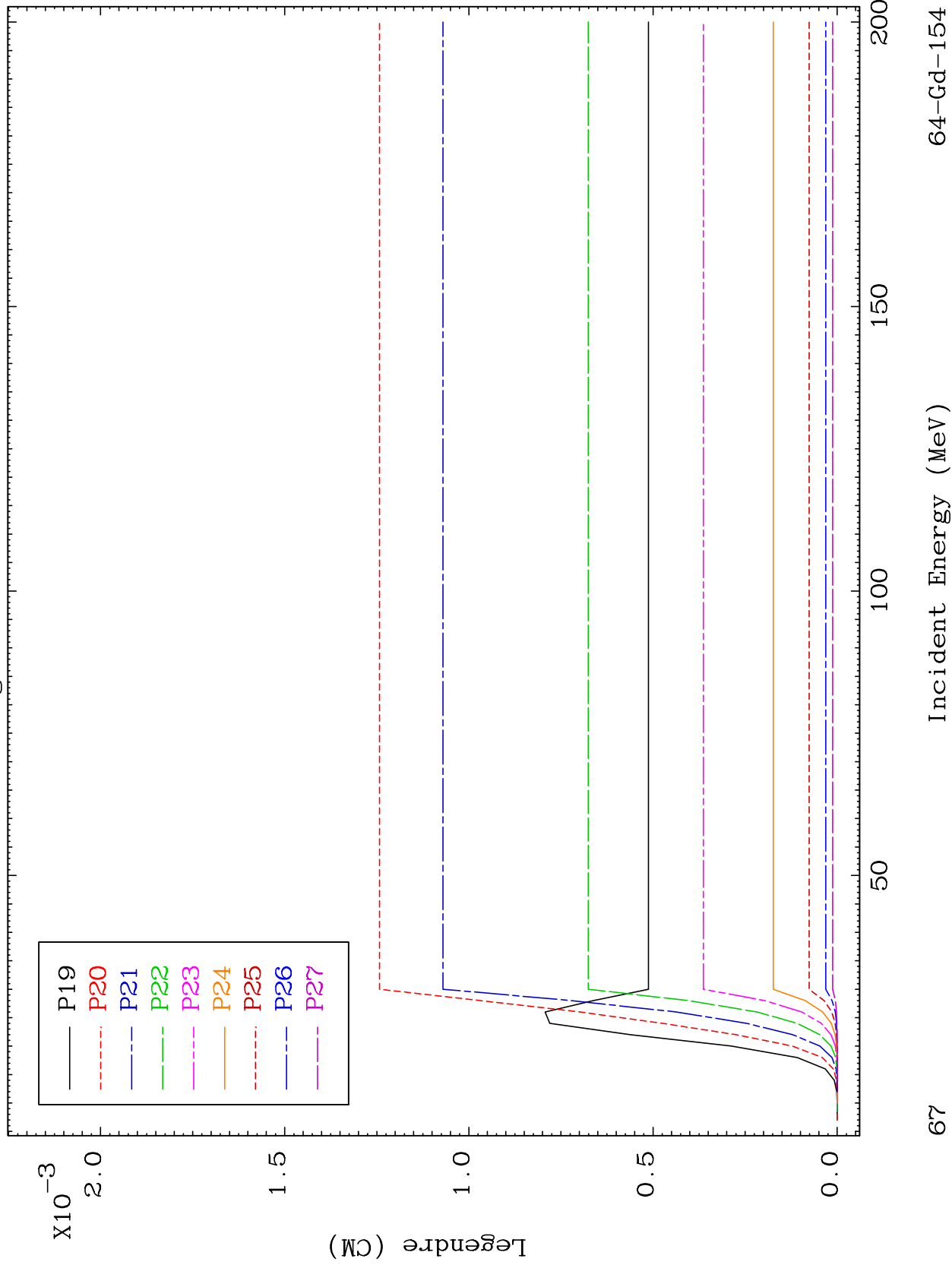
64-Gd-154



MAT 6431

MT= 63 (n,n') Level  
Legendre Coefficients

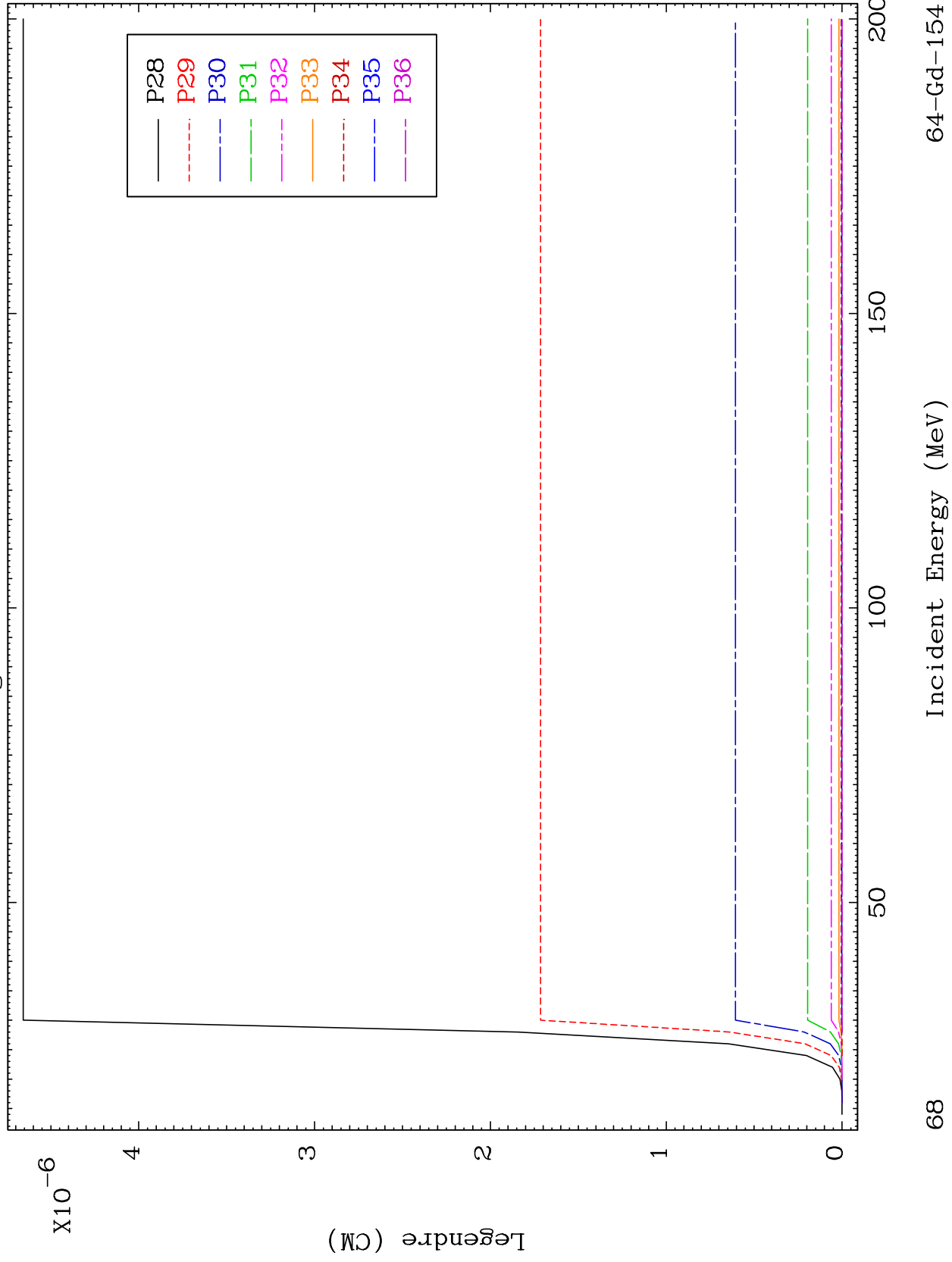
64-Gd-154



MAT 6431

MT= 63 (n,n') Level  
Legendre Coefficients

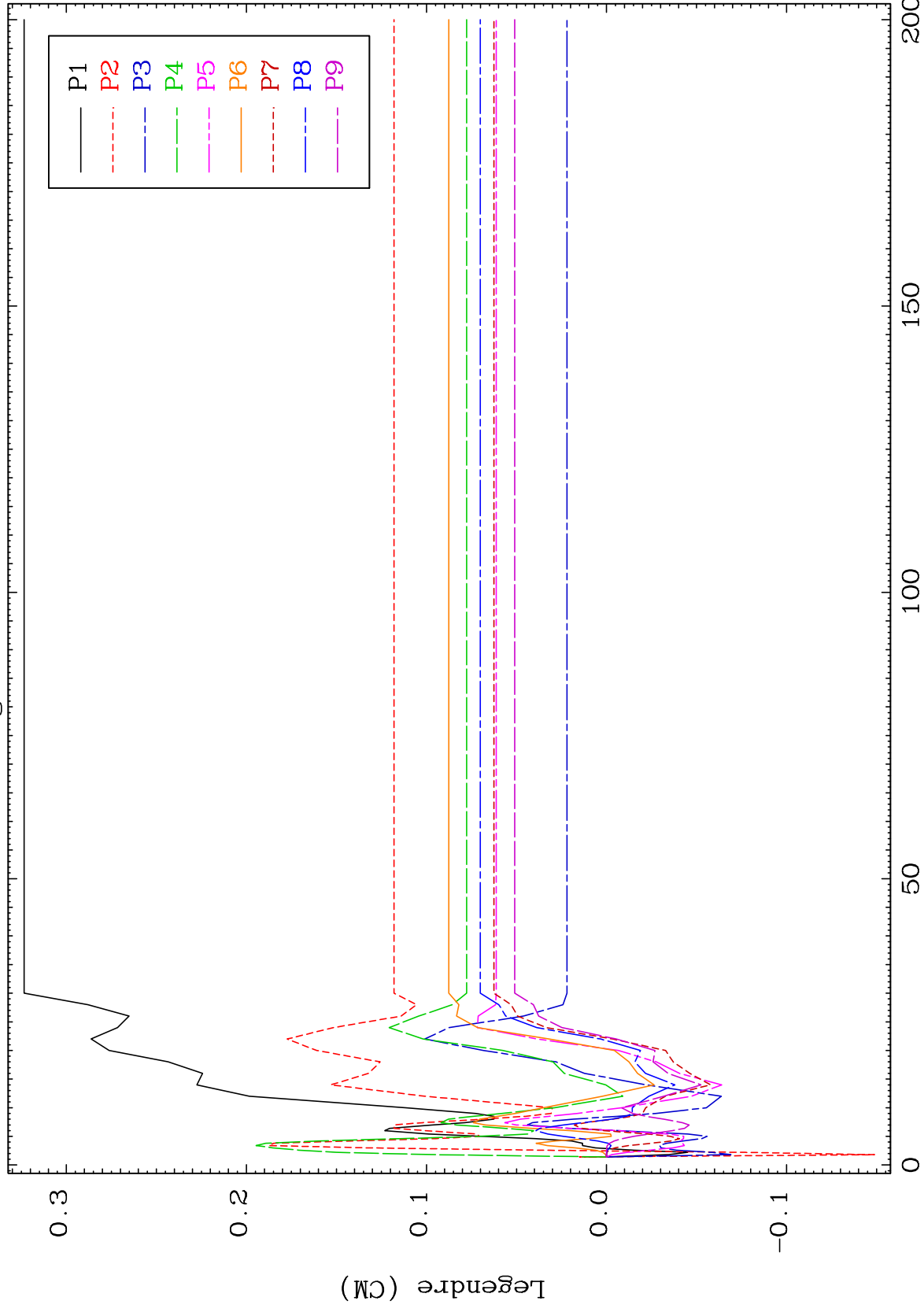
64-Gd-154



MAT 6431

MT= 64 (n,n') Level  
Legendre Coefficients

64-Gd-154



69

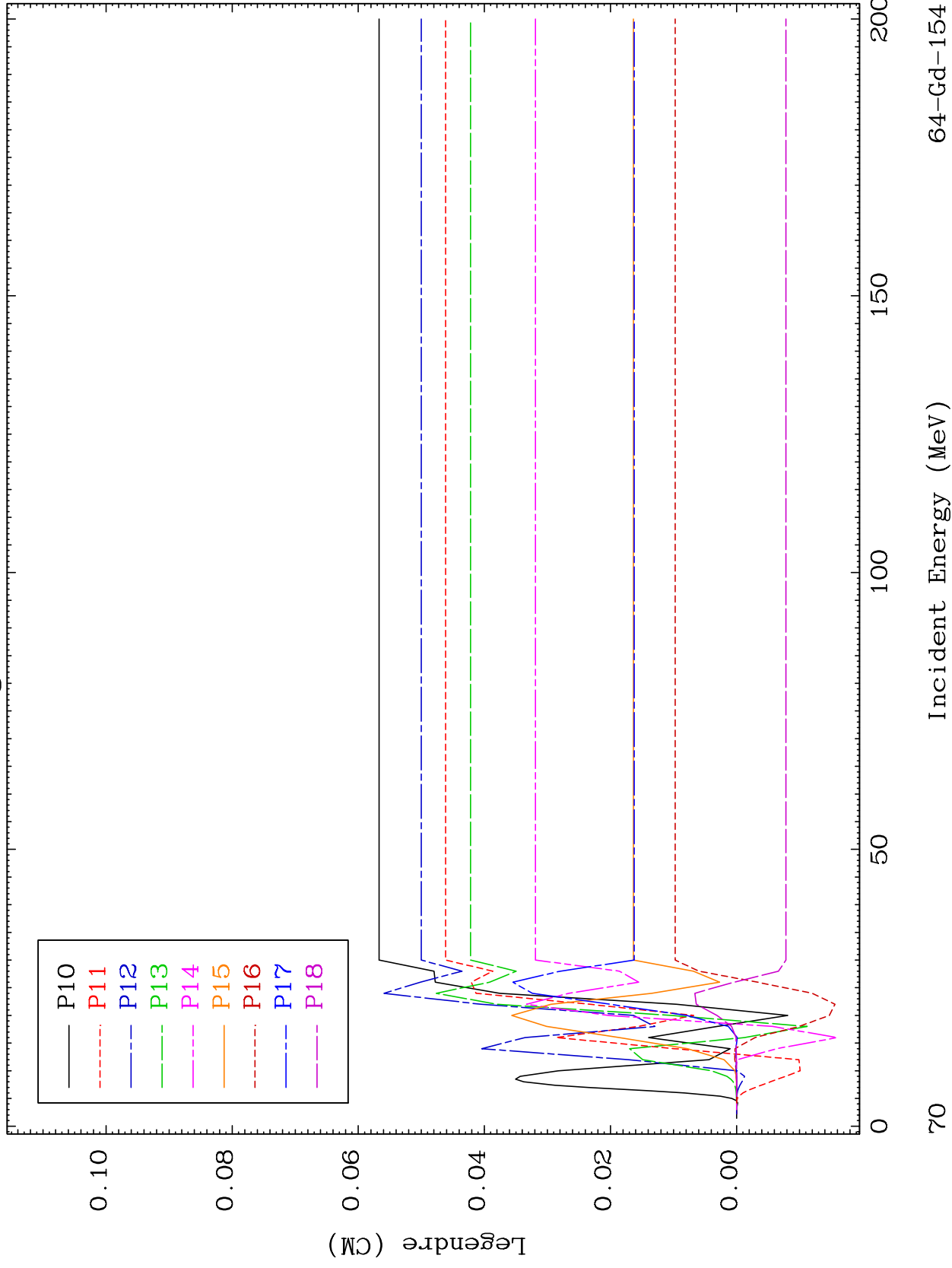
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 64 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

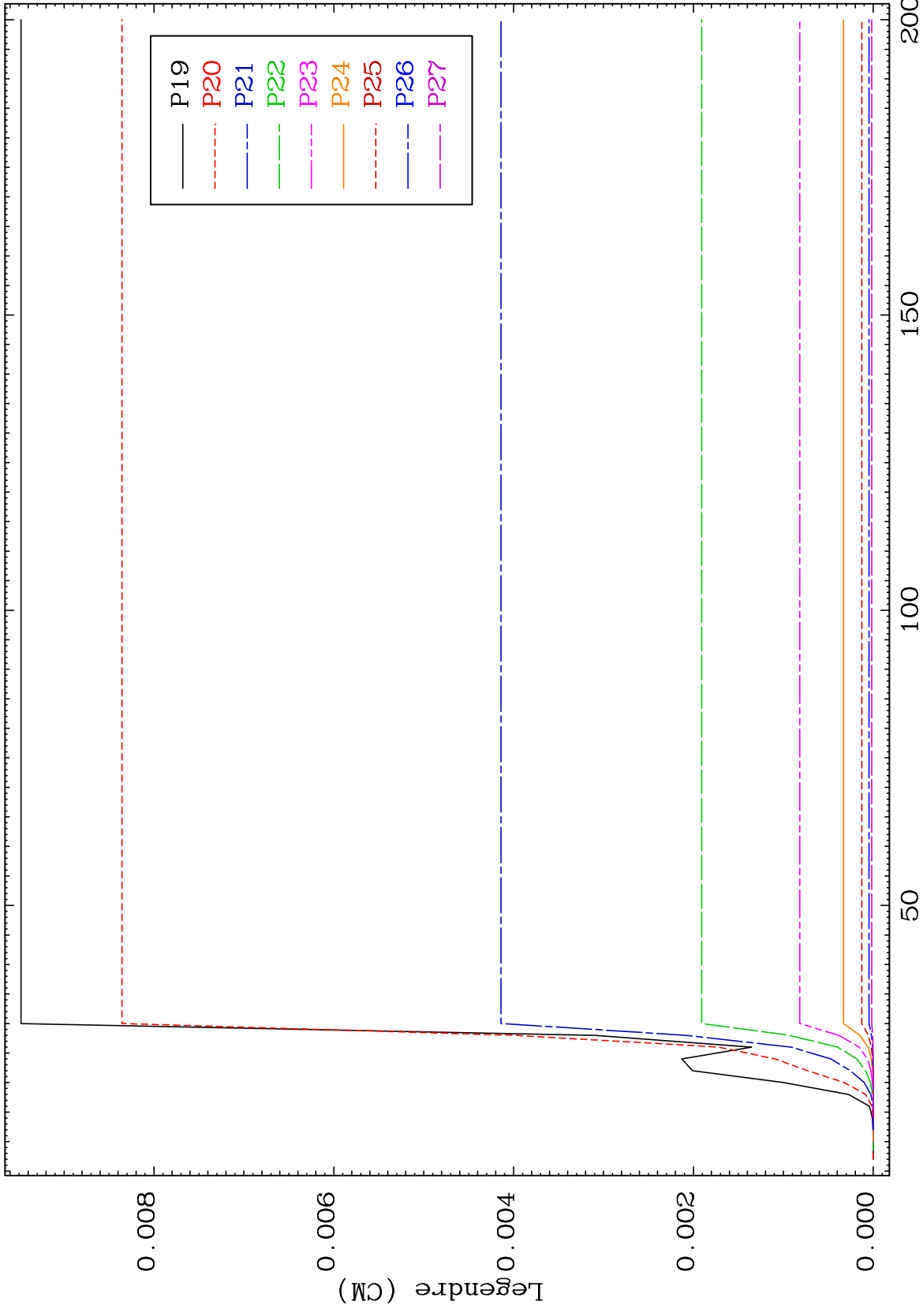
Incident Energy (MeV)

70

MAT 6431

MT= 64 (n,n') Level  
Legendre Coefficients

64-Gd-154



71

Incident Energy (MeV)

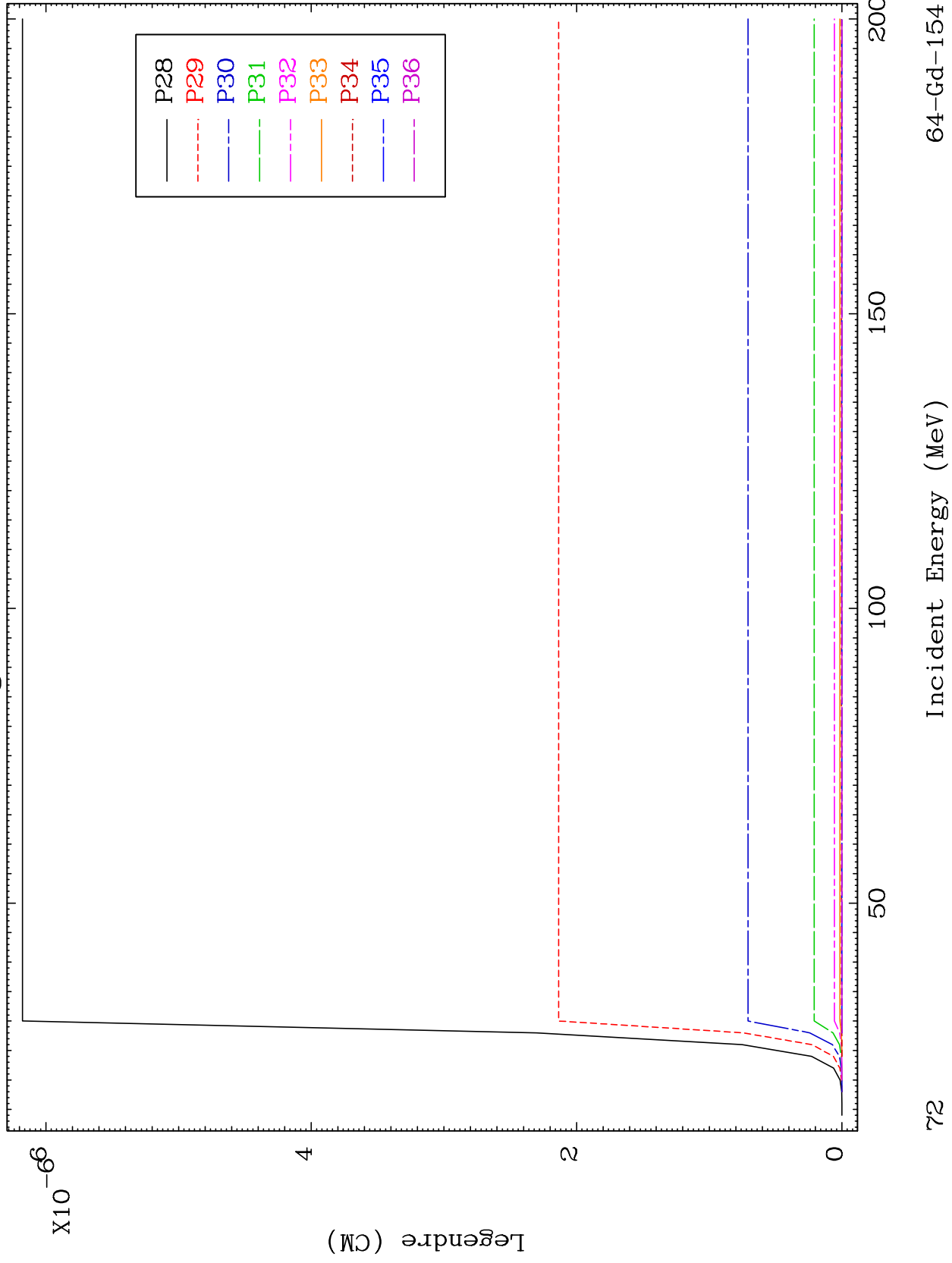
64-Gd-154



MAT 6431

MT= 64 (n,n') Level  
Legendre Coefficients

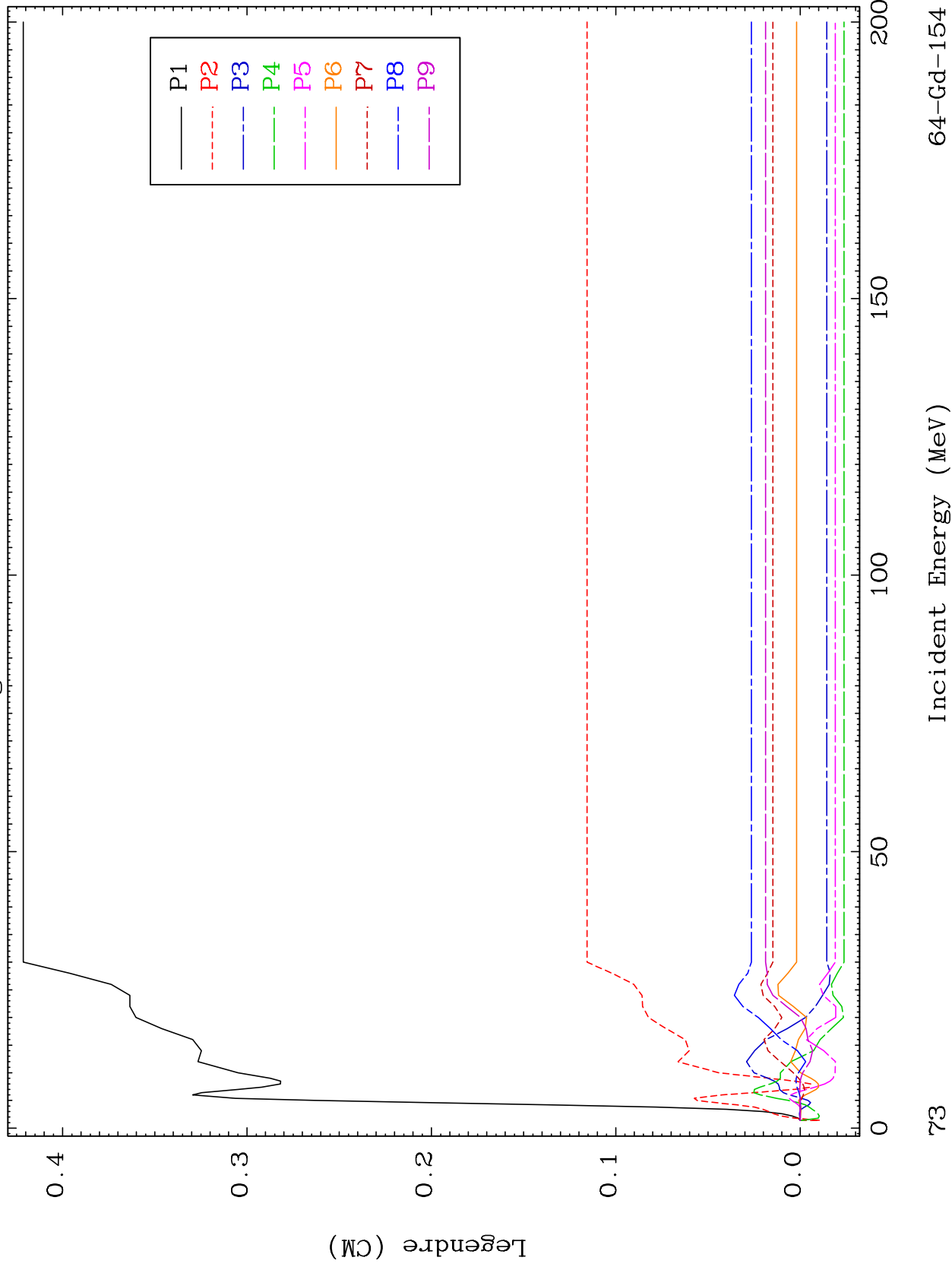
64-Gd-154



MAT 6431

MT= 65 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

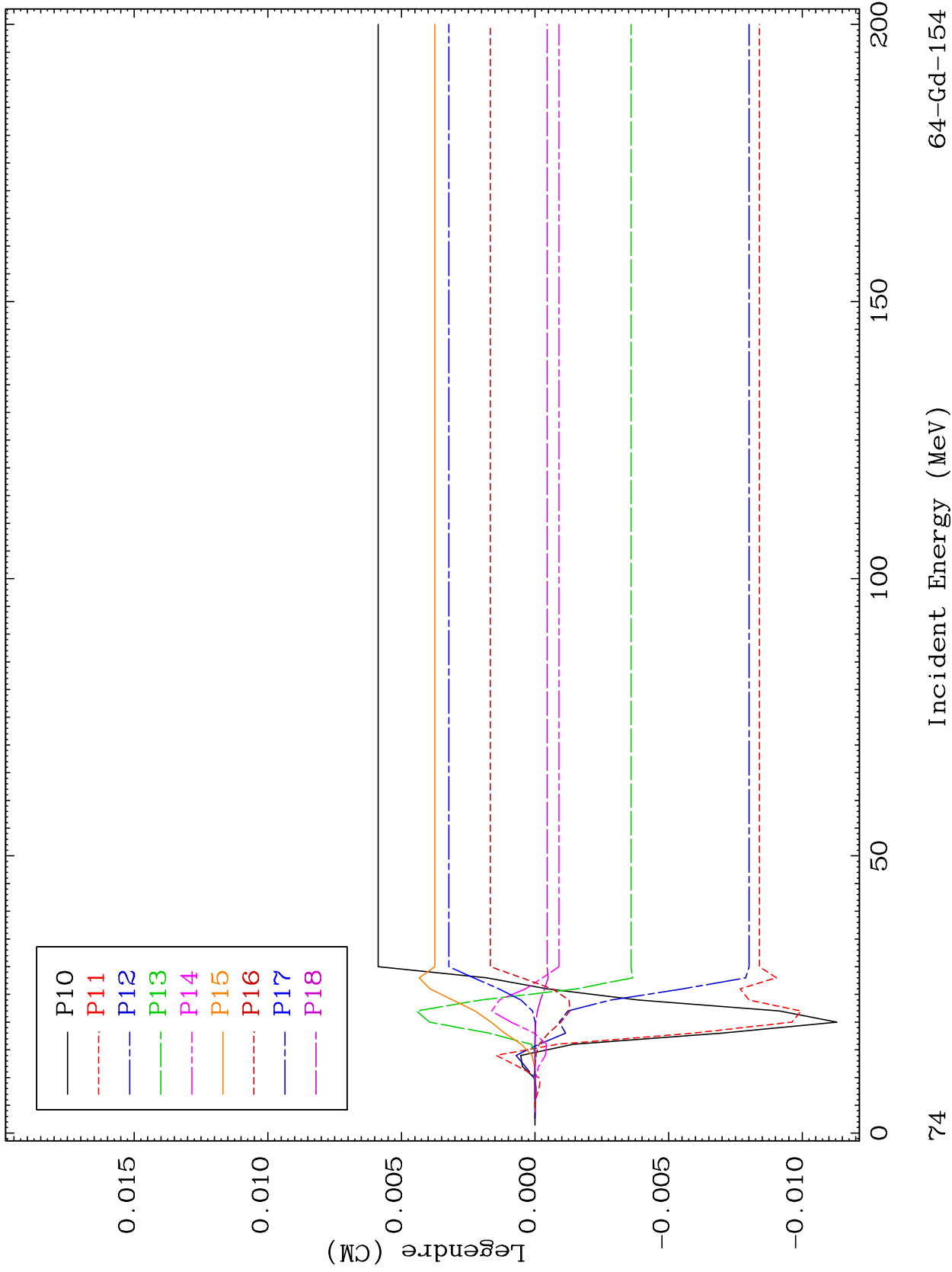
Incident Energy (MeV)

73

MAT 6431

MT= 65 (n,n') Level  
Legendre Coefficients

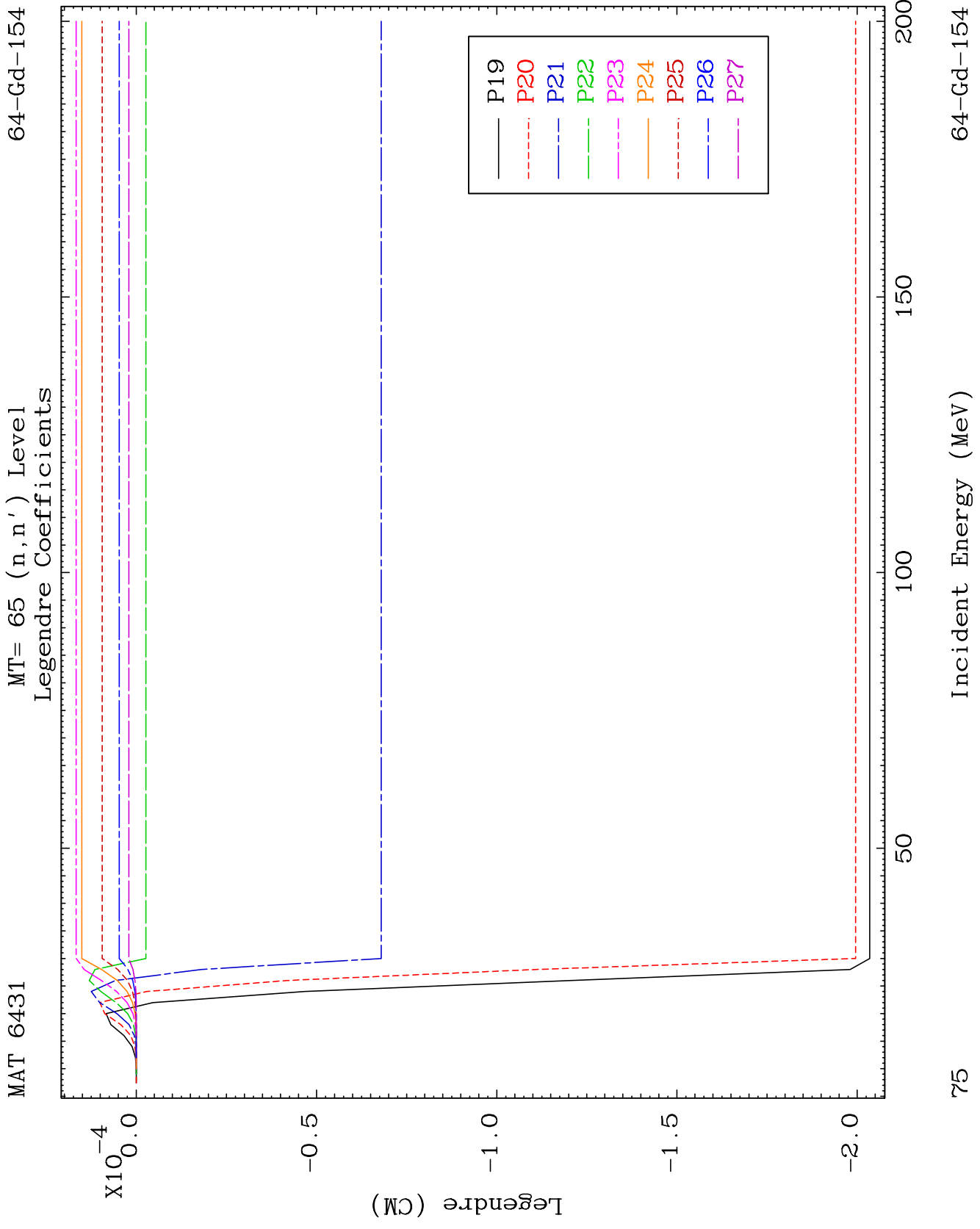
64-Gd-154



74

Incident Energy (MeV)

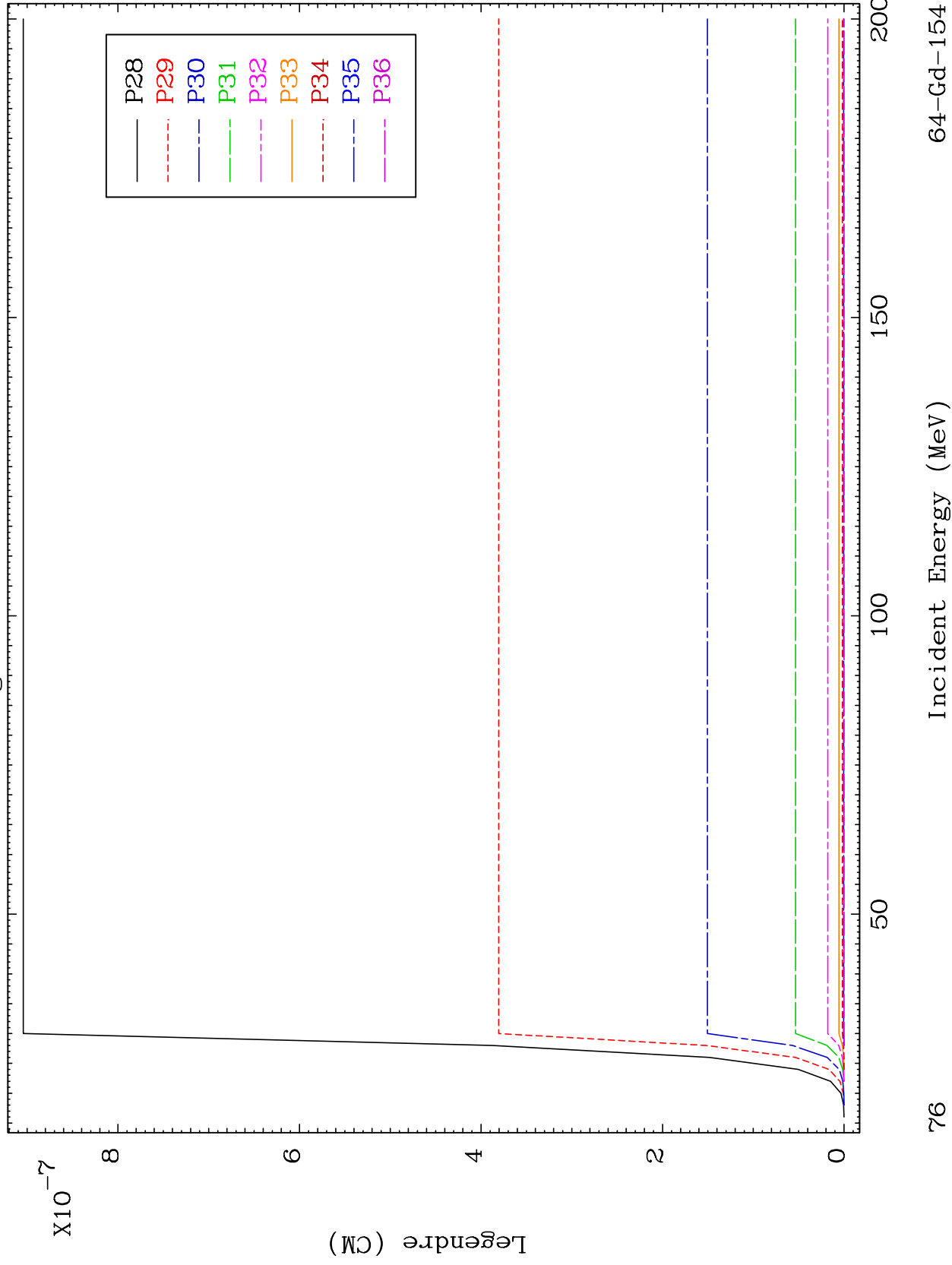
64-Gd-154



MAT 6431

MT= 65 (n,n') Level  
Legendre Coefficients

64-Gd-154



76

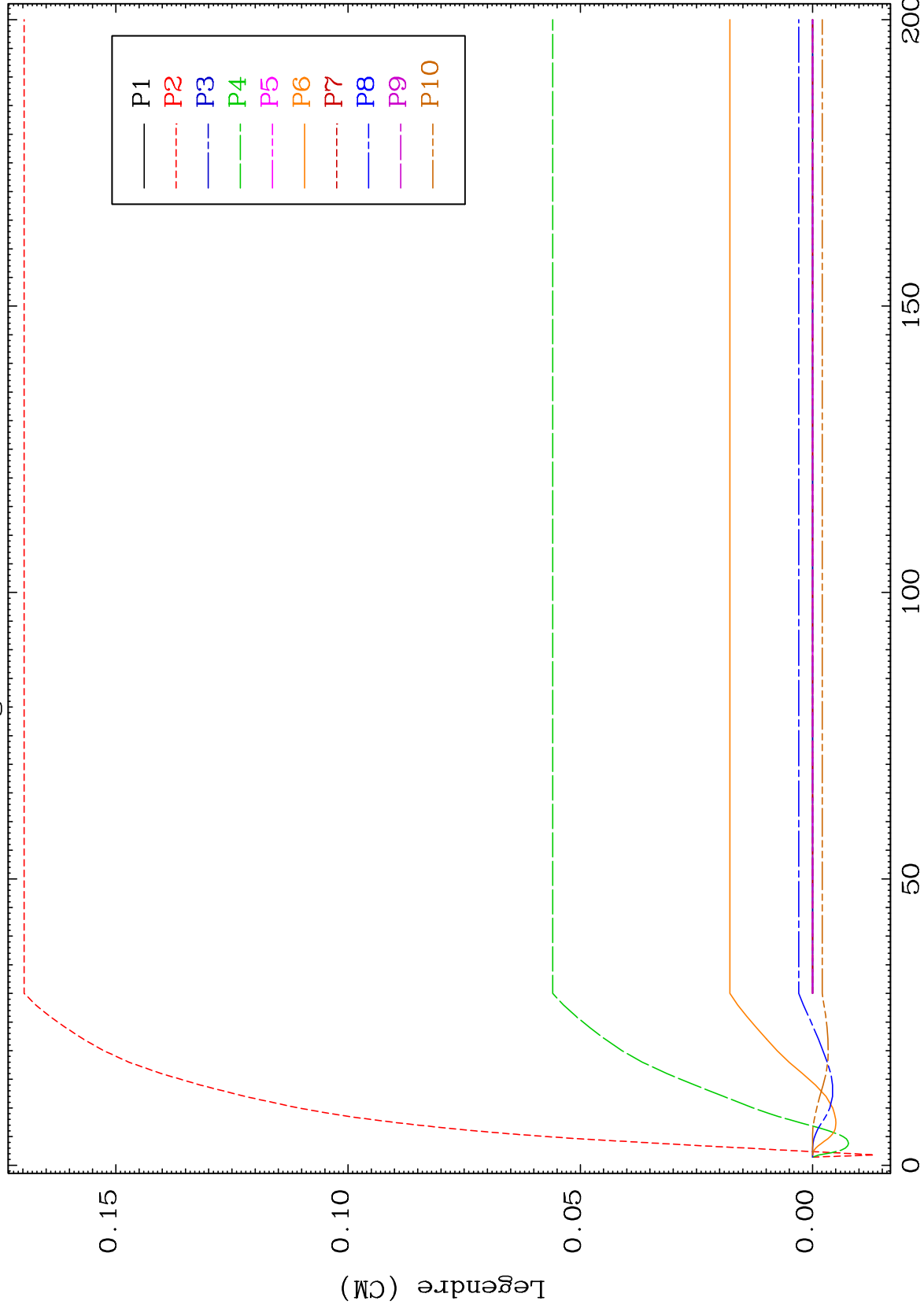
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 66 (n,n') Level  
Legendre Coefficients

64-Gd-154



77

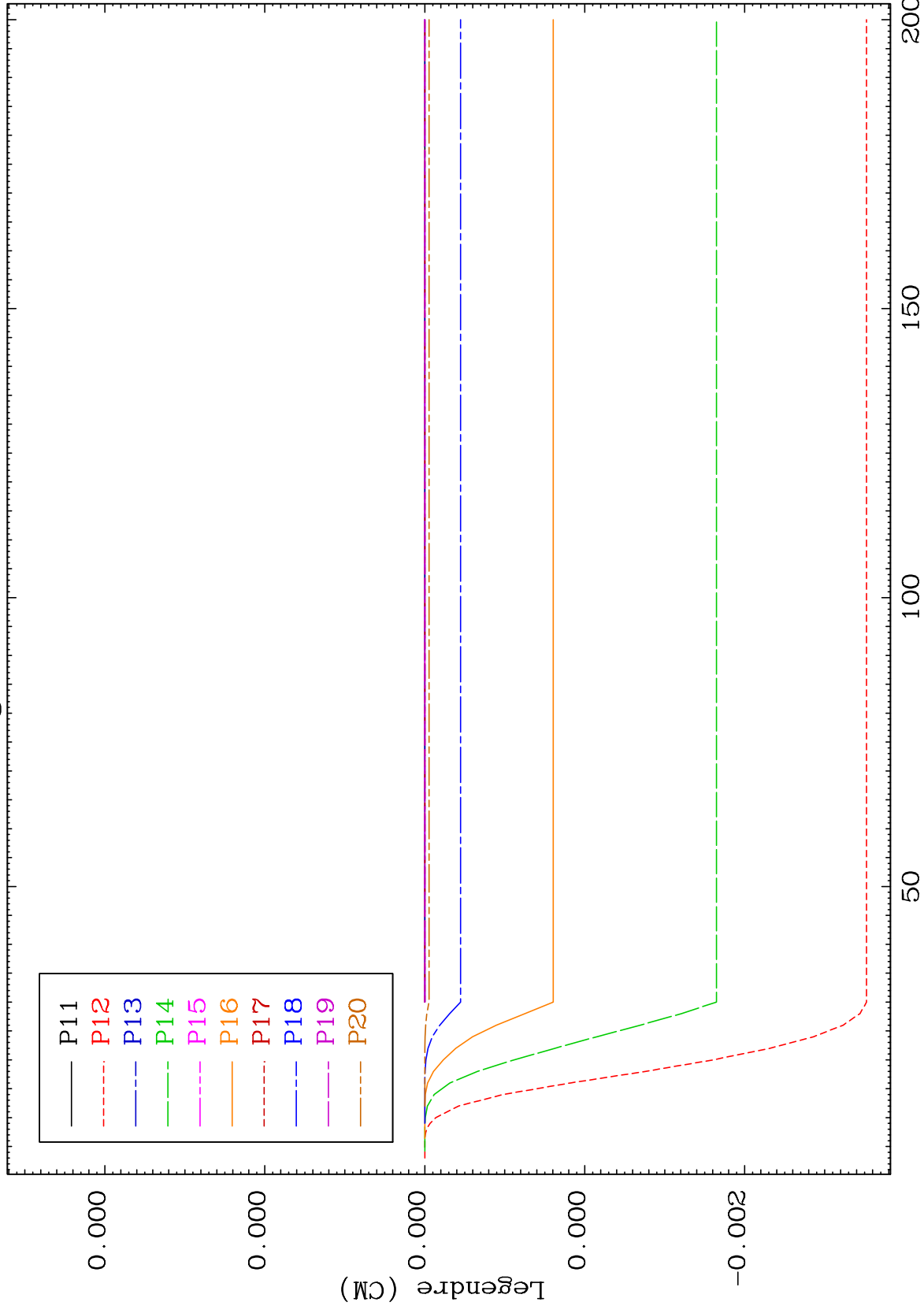
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 66 (n,n') Level  
Legendre Coefficients

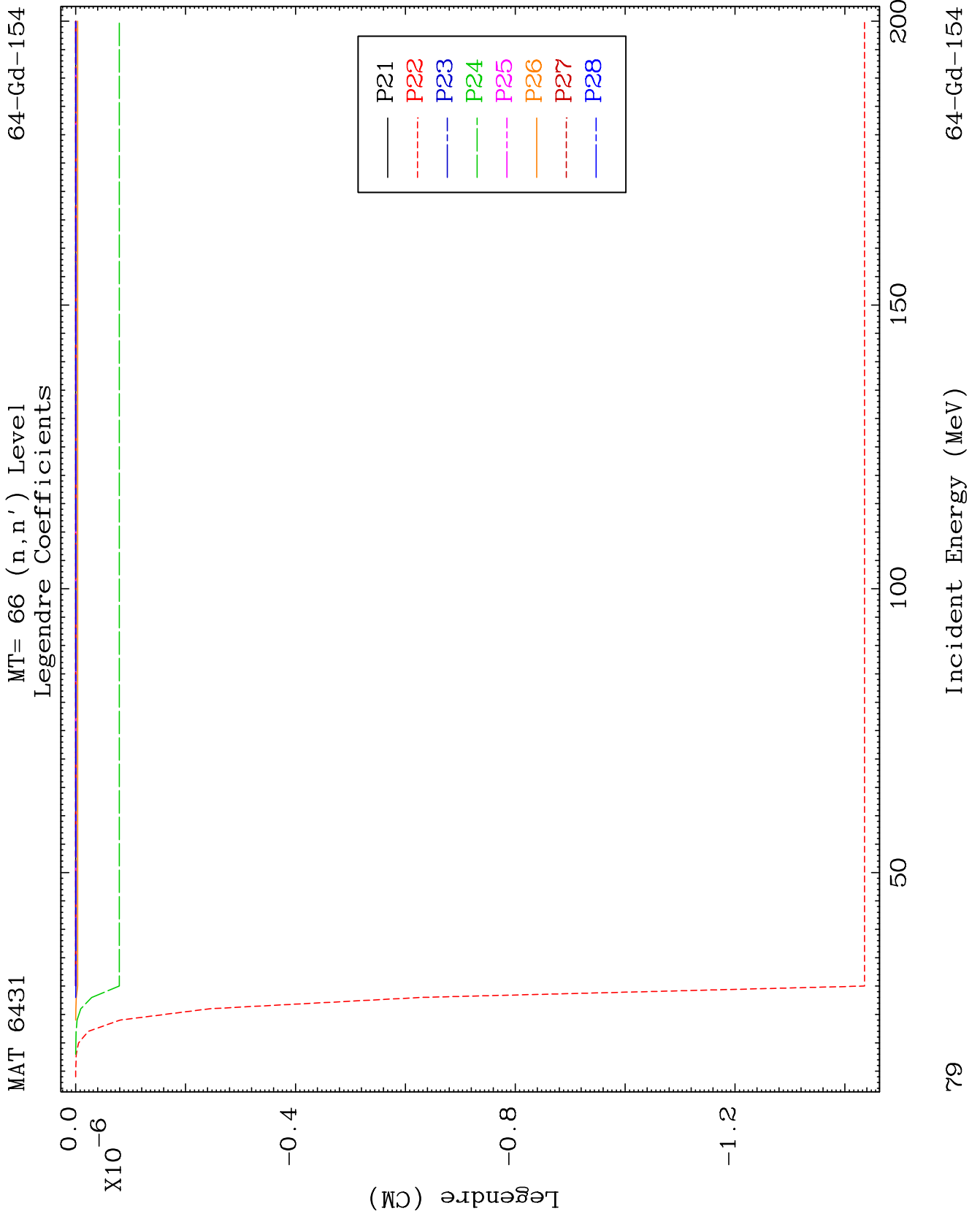
64-Gd-154



78

Incident Energy (MeV)

64-Gd-154

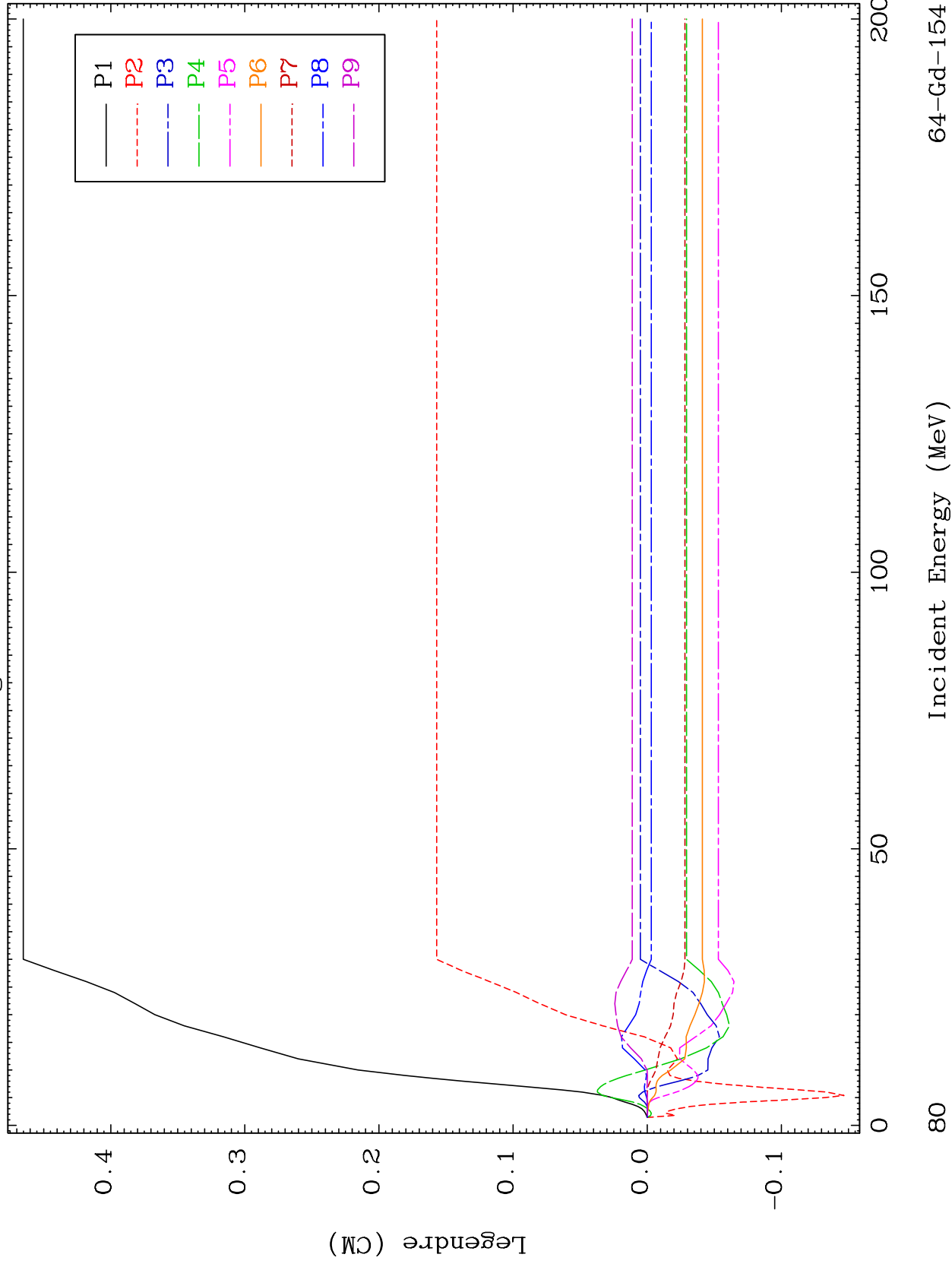




MAT 6431

MT= 67 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

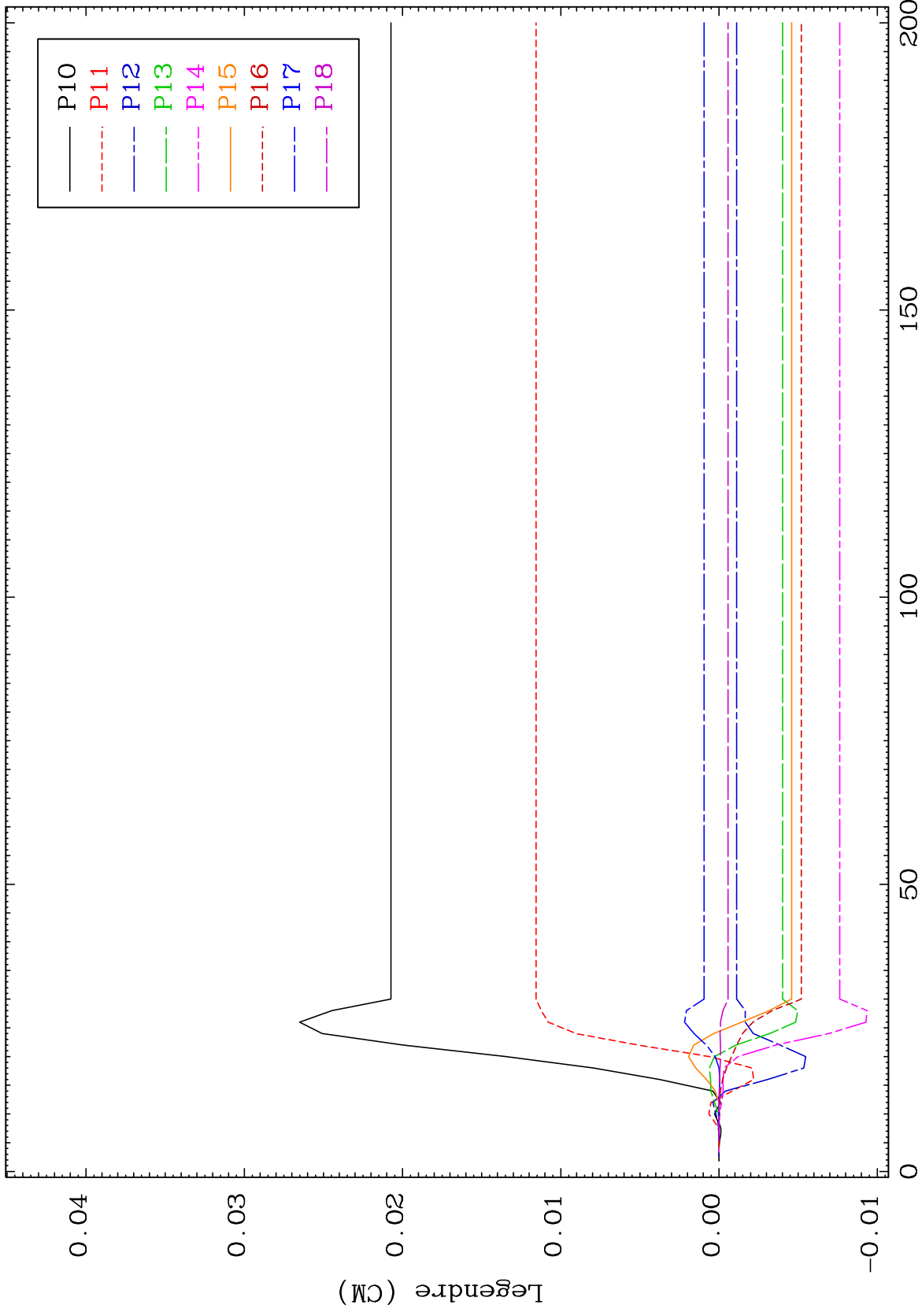
Incident Energy (MeV)

80

MAT 6431

MT= 67 (n,n') Level  
Legendre Coefficients

64-Gd-154



81

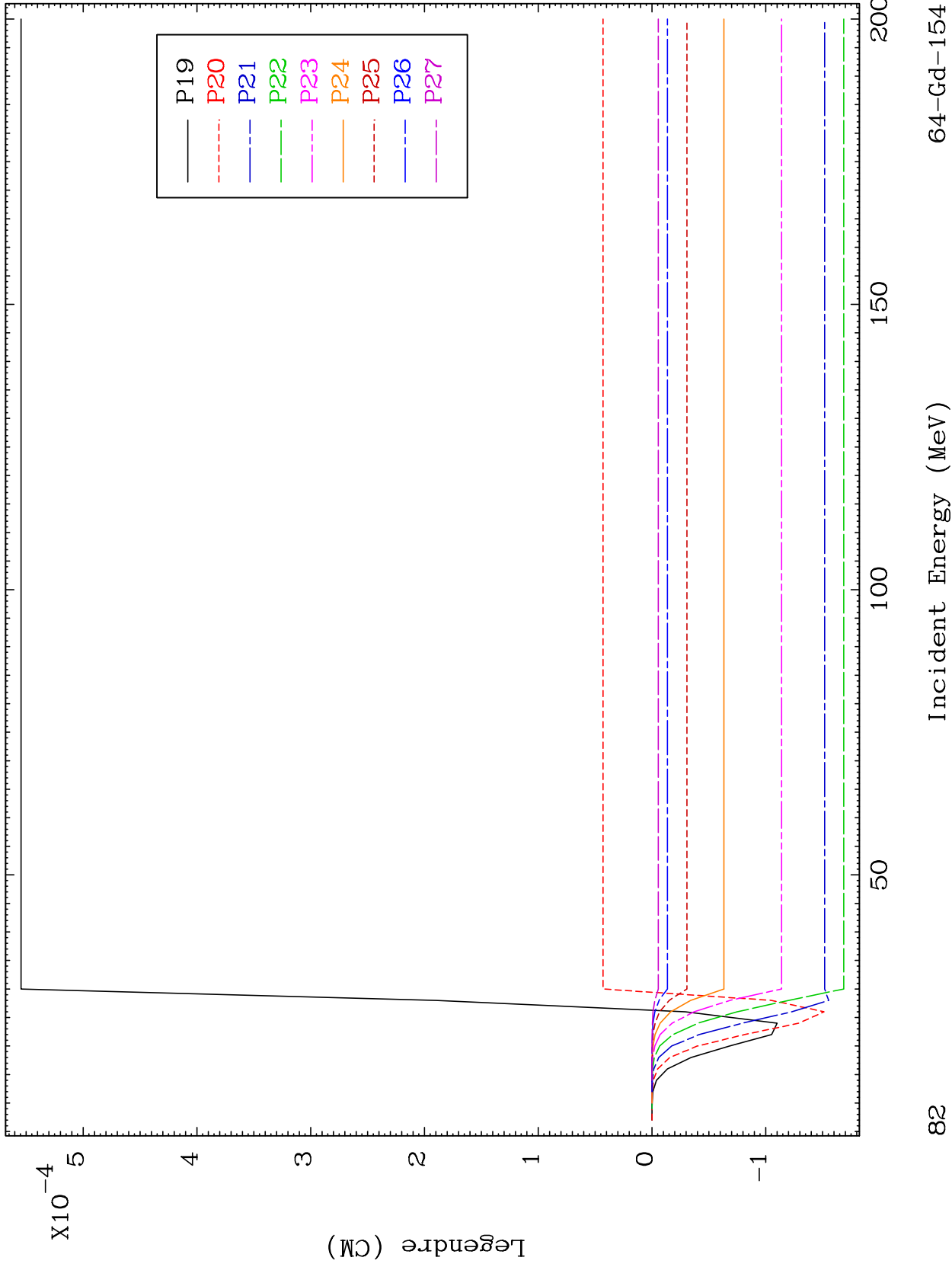
Incident Energy (MeV)

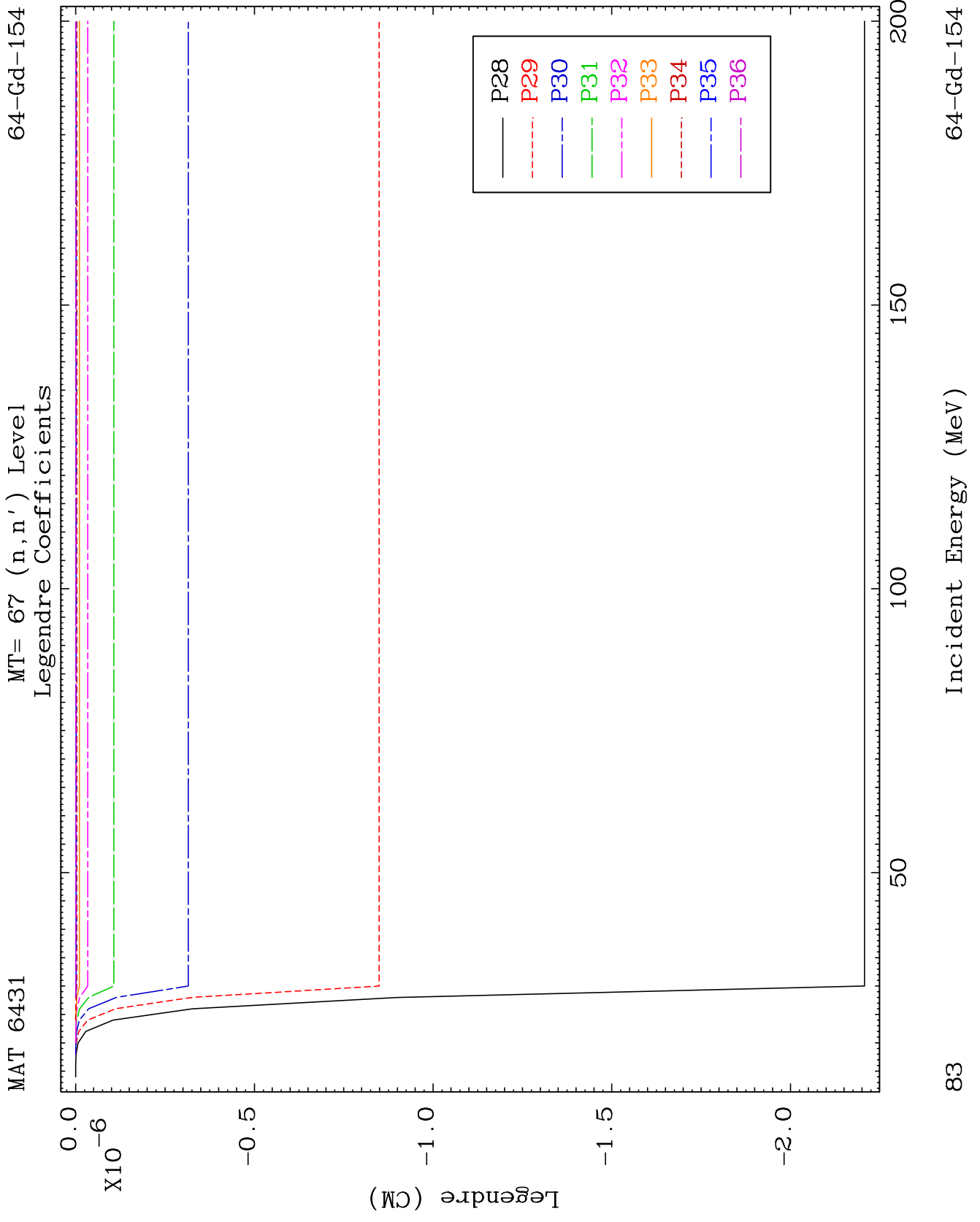
64-Gd-154

MAT 6431

MT= 67 (n,n') Level  
Legendre Coefficients

64-Gd-154

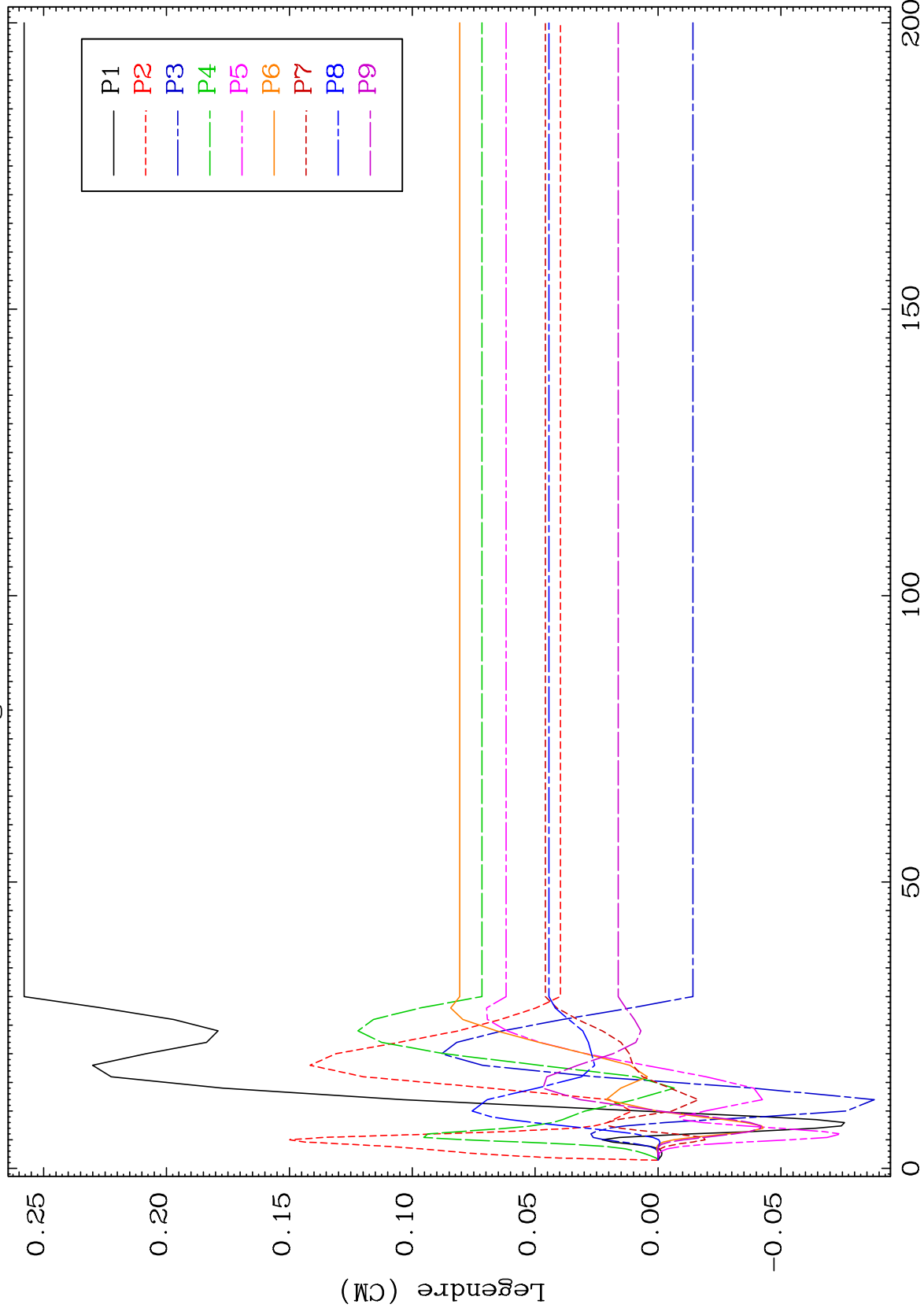




MAT 6431

MT= 68 (n,n') Level  
Legendre Coefficients

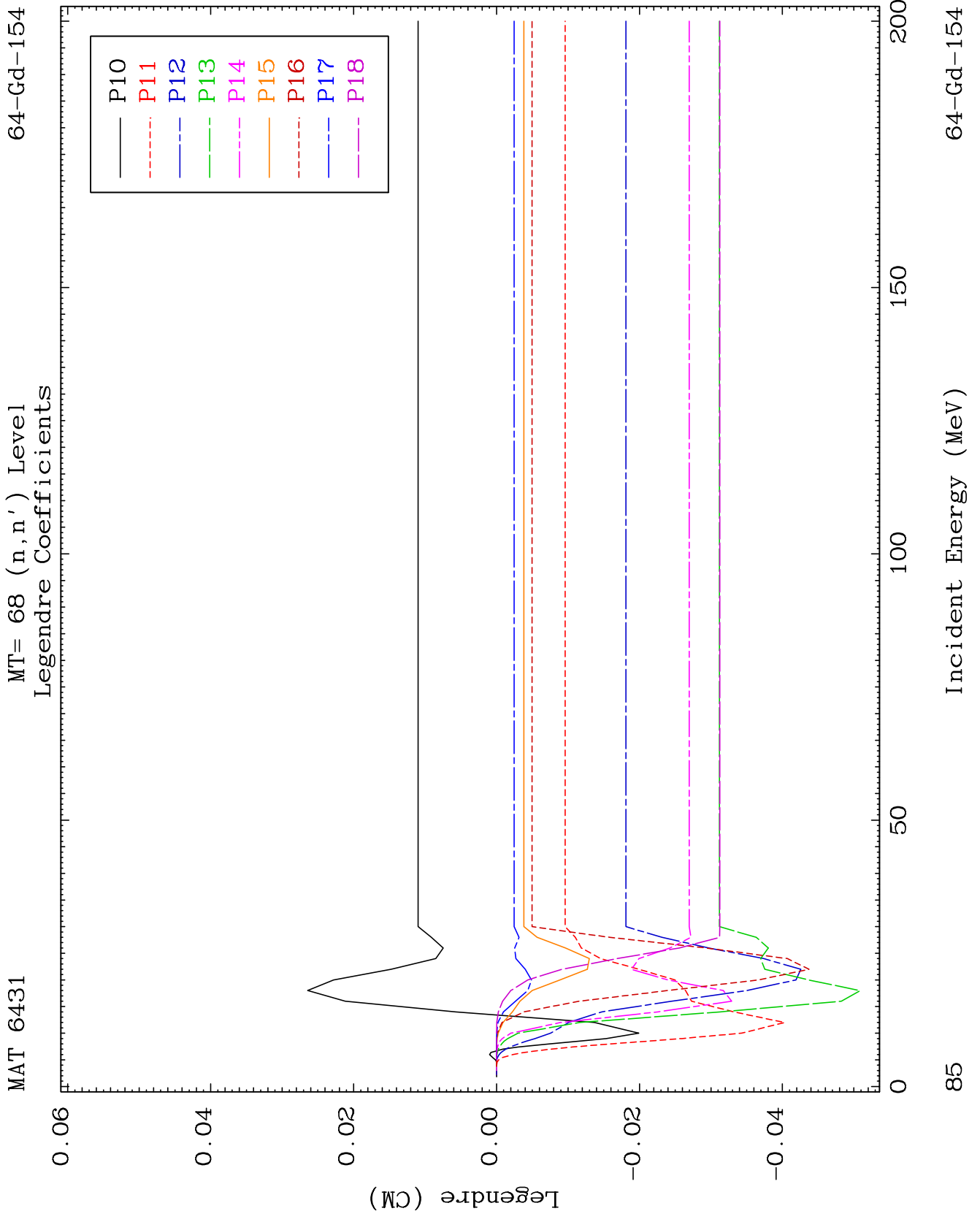
64-Gd-154

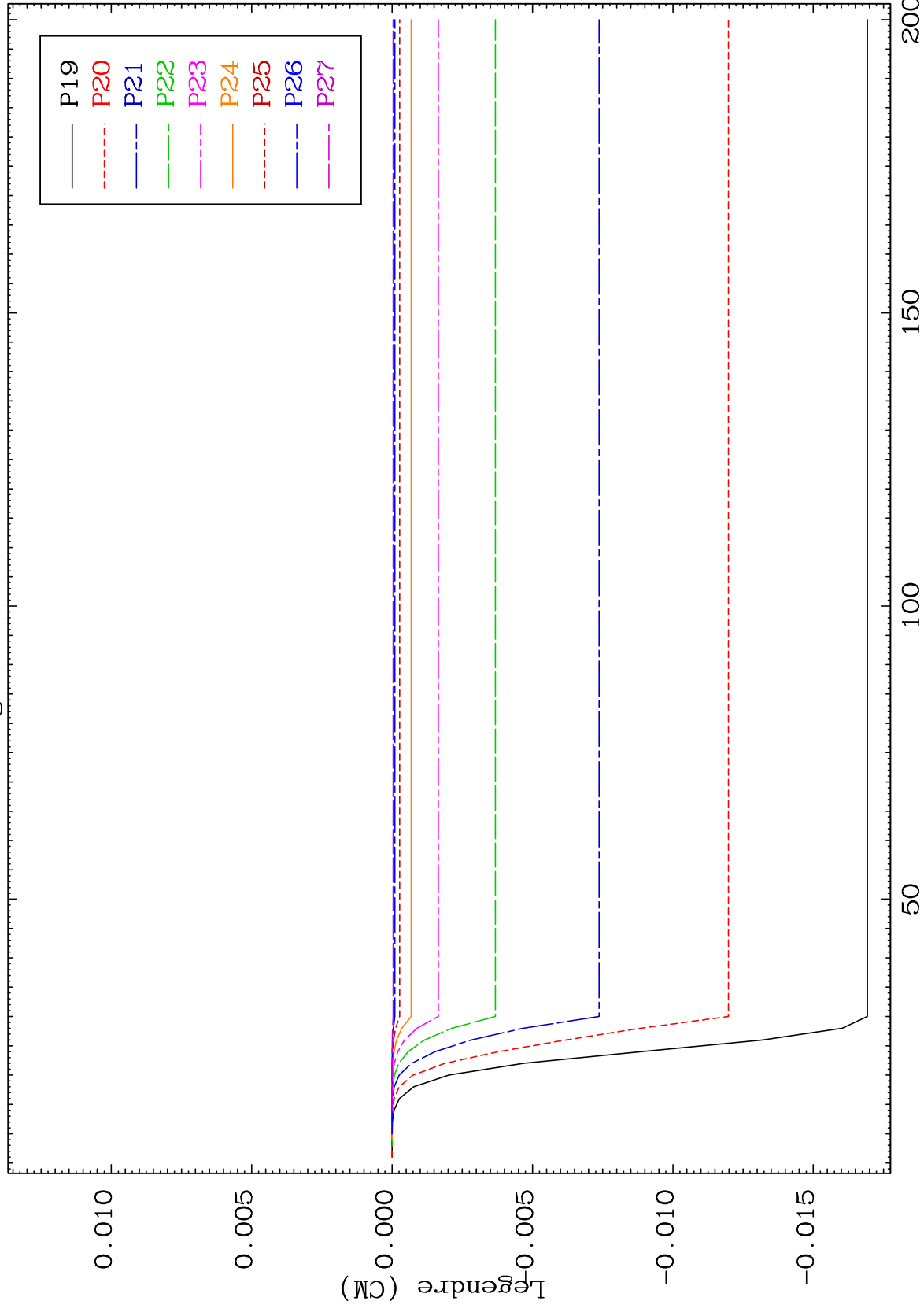


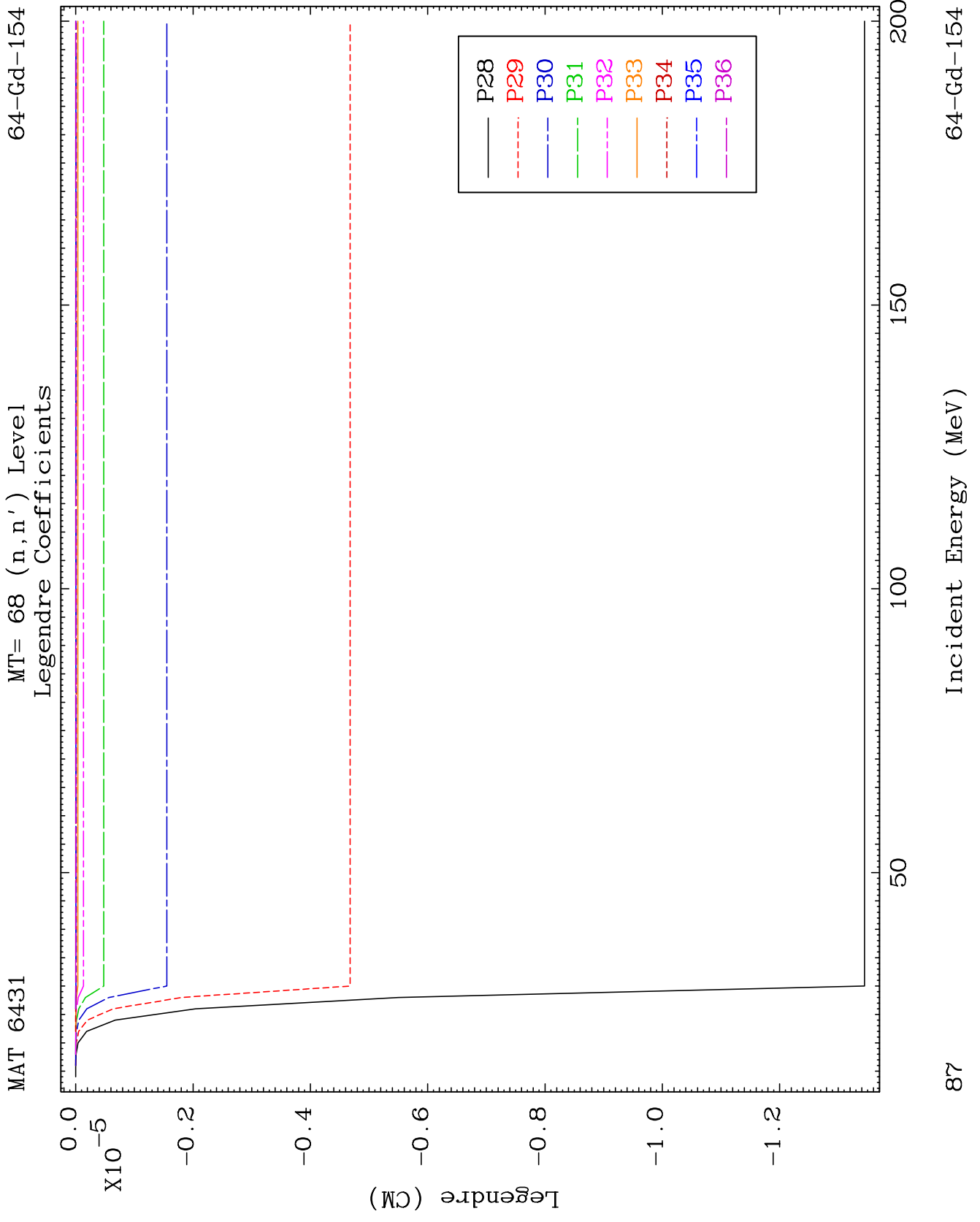
84

Incident Energy (MeV)

64-Gd-154





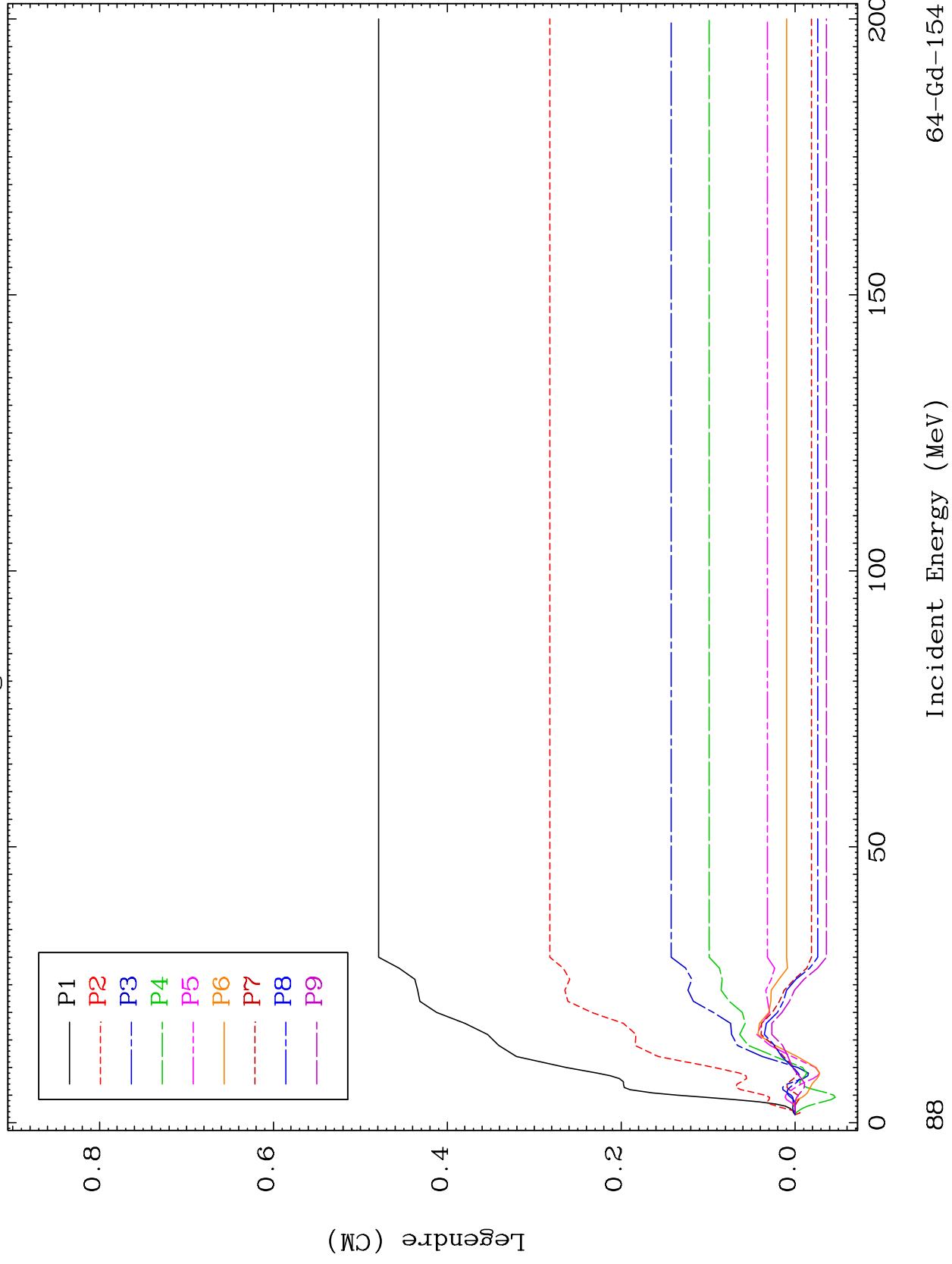




MAT 6431

MT= 69 (n,n') Level  
Legendre Coefficients

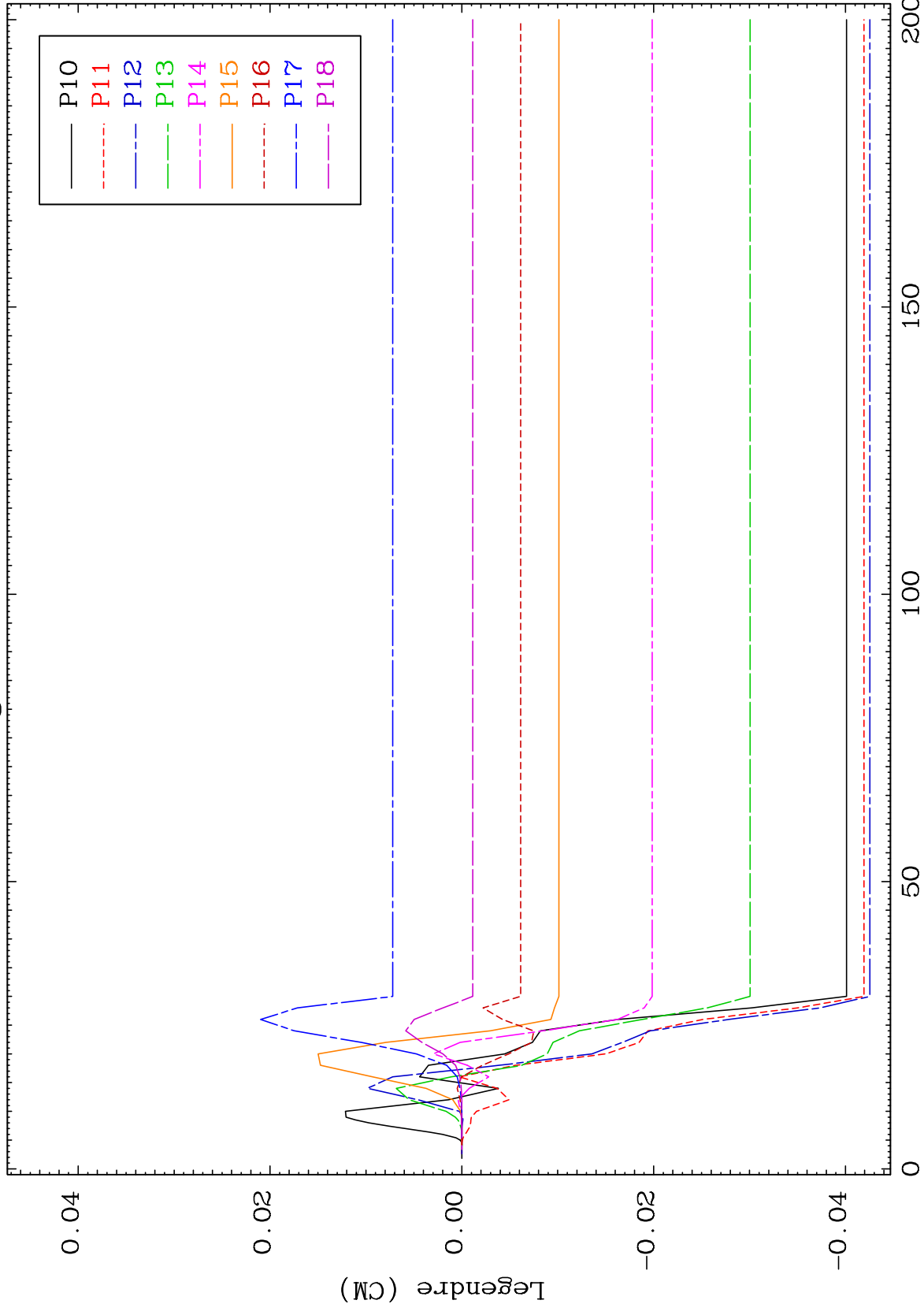
64-Gd-154



MAT 6431

MT= 69 (n,n') Level  
Legendre Coefficients

64-Gd-154



89

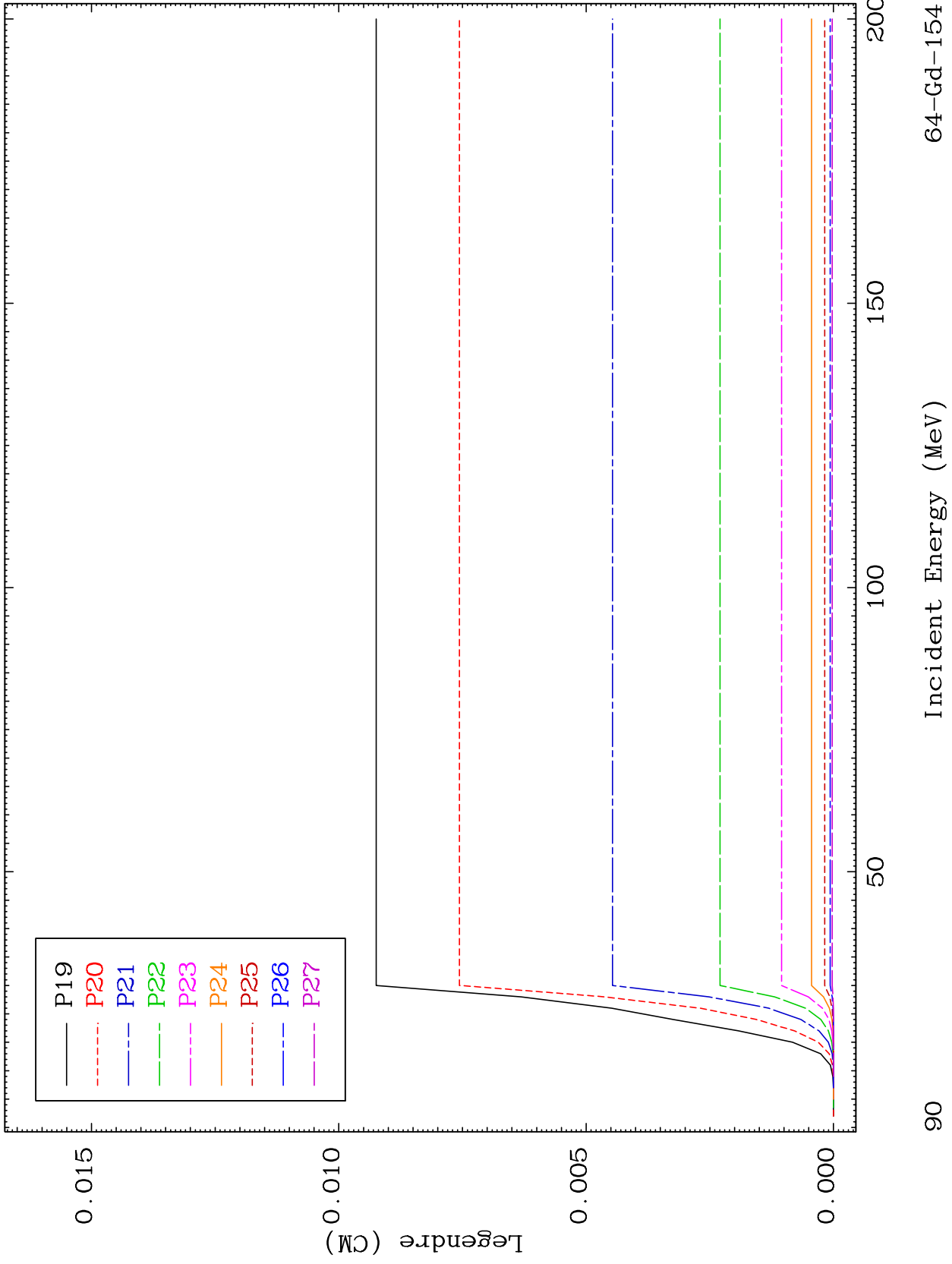
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 69 (n,n') Level  
Legendre Coefficients

64-Gd-154



90

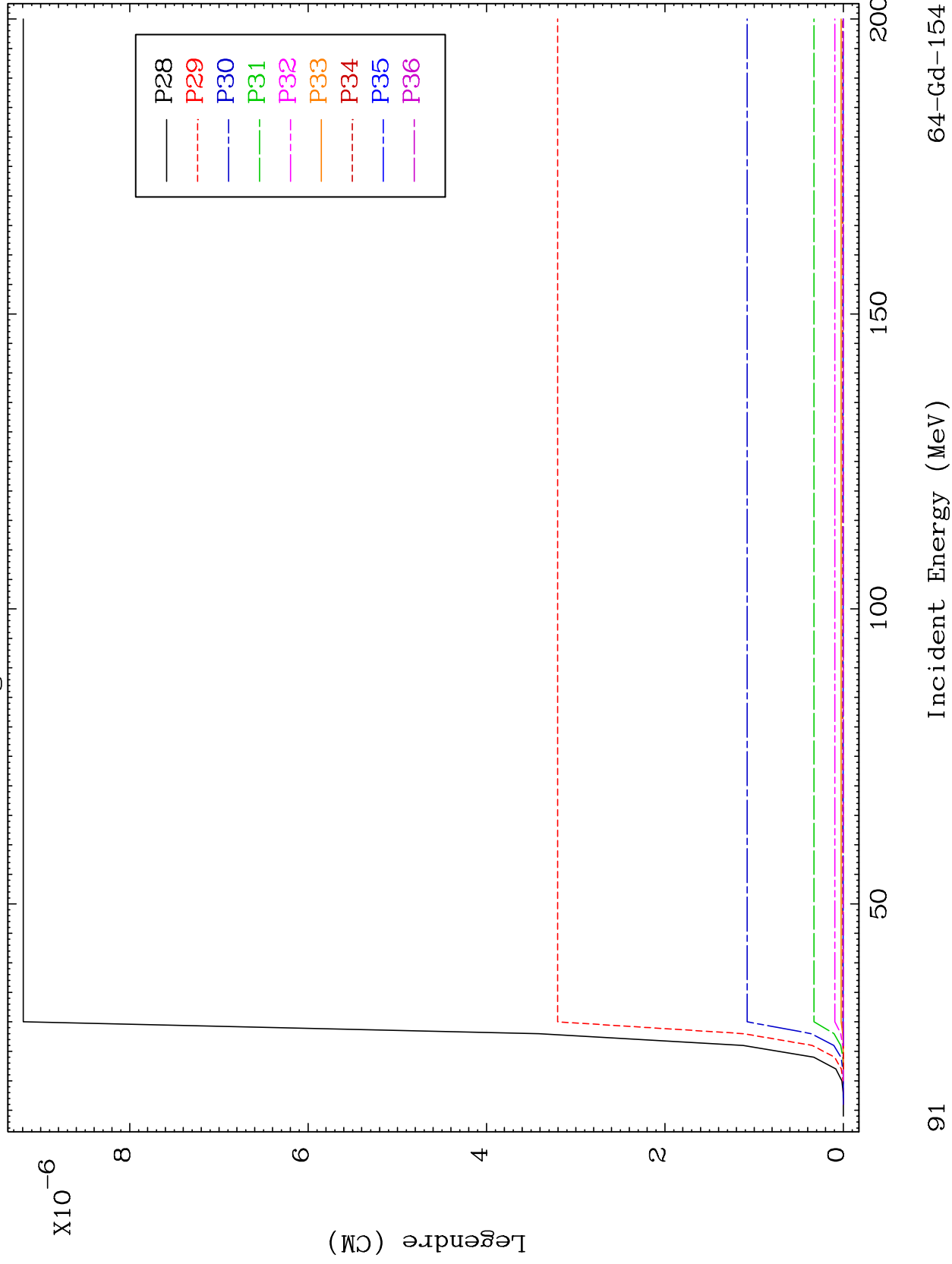
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 69 (n,n') Level  
Legendre Coefficients

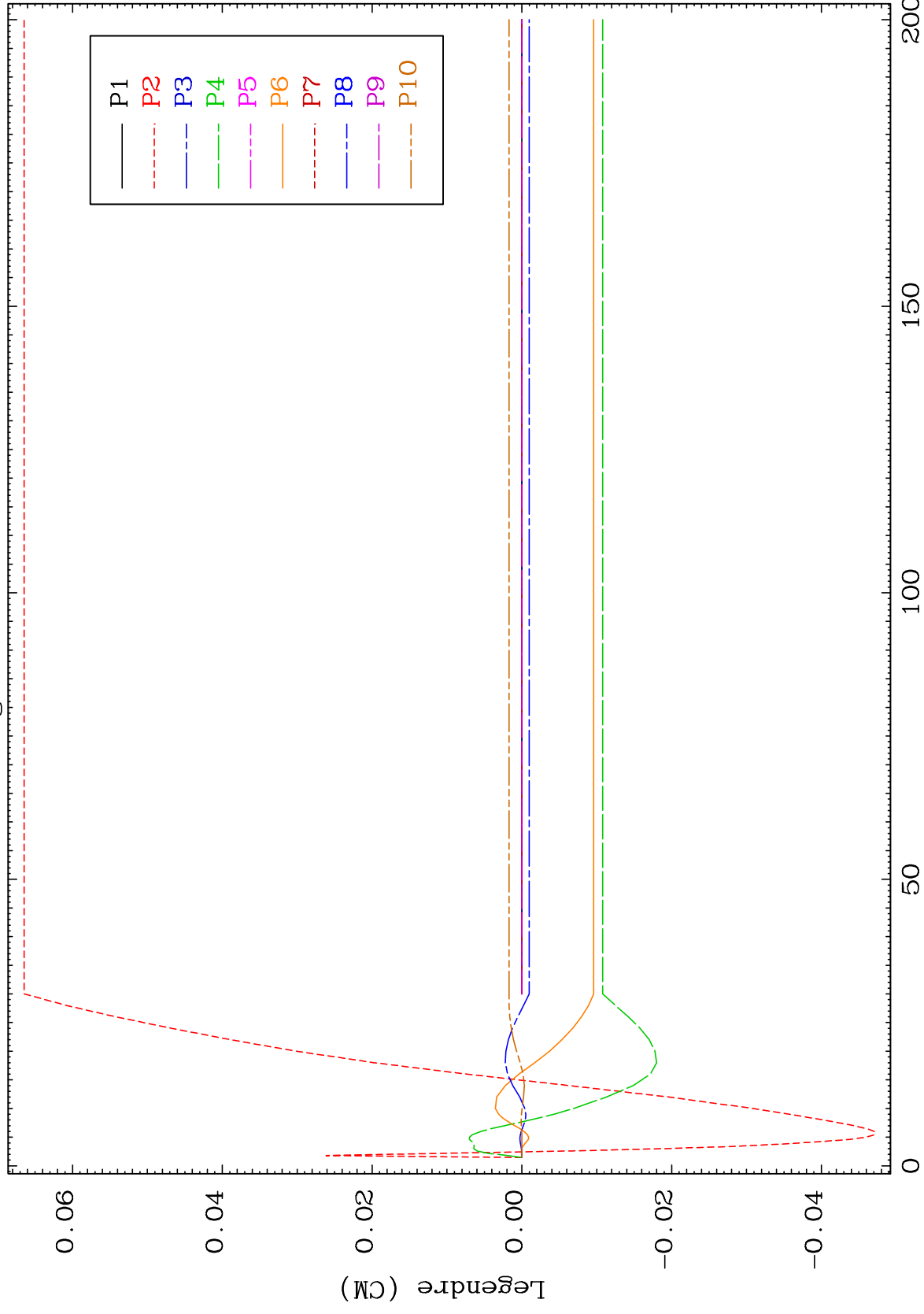
64-Gd-154



MAT 6431

MT= 70 (n,n') Level  
Legendre Coefficients

64-Gd-154



92

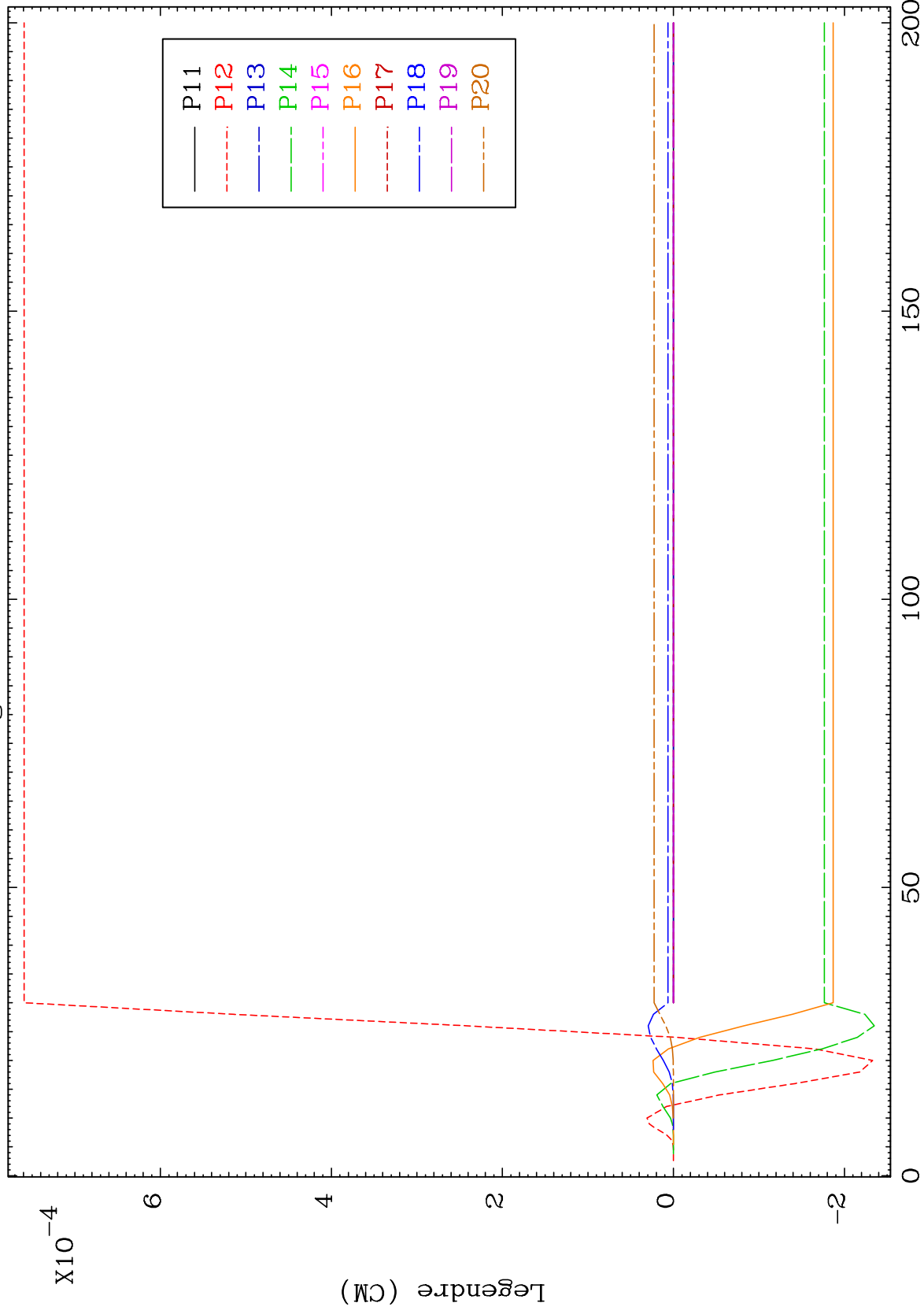
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 70 (n,n') Level  
Legendre Coefficients

64-Gd-154

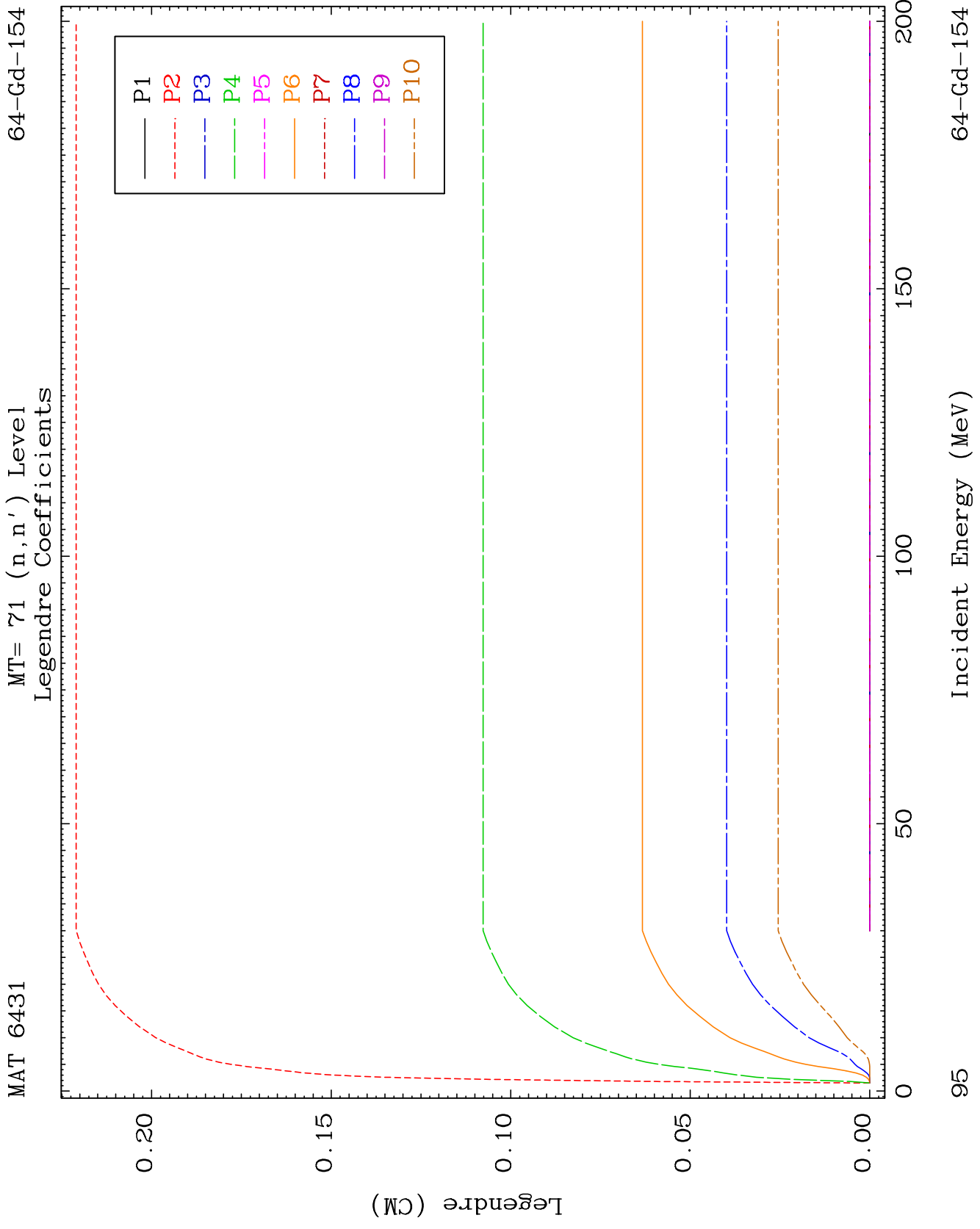


93

Incident Energy (MeV)

64-Gd-154



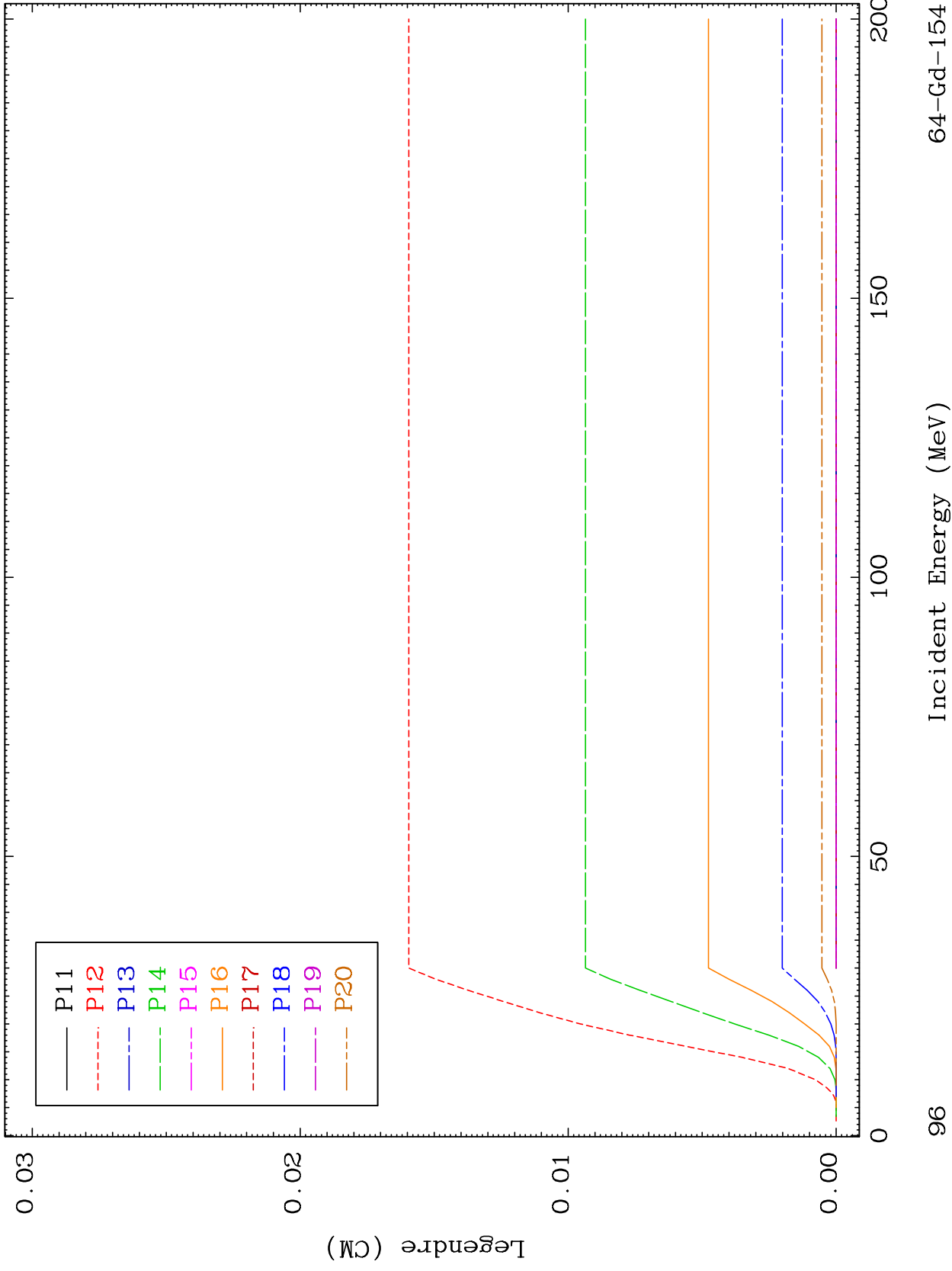




MAT 6431

MT= 71 (n,n') Level  
Legendre Coefficients

64-Gd-154



96

Incident Energy (MeV)

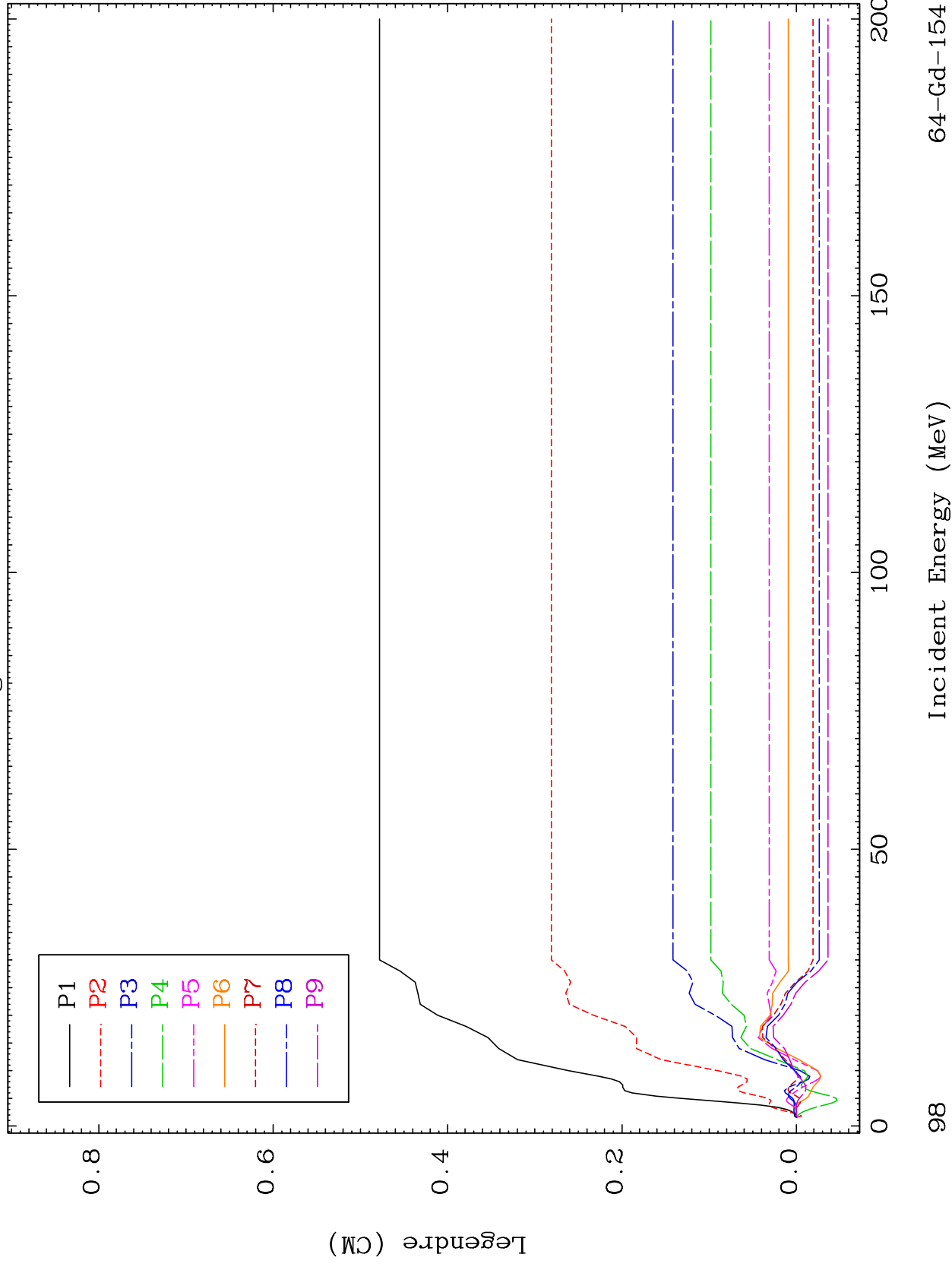
64-Gd-154



MAT 6431

MT= 72 (n,n') Level  
Legendre Coefficients

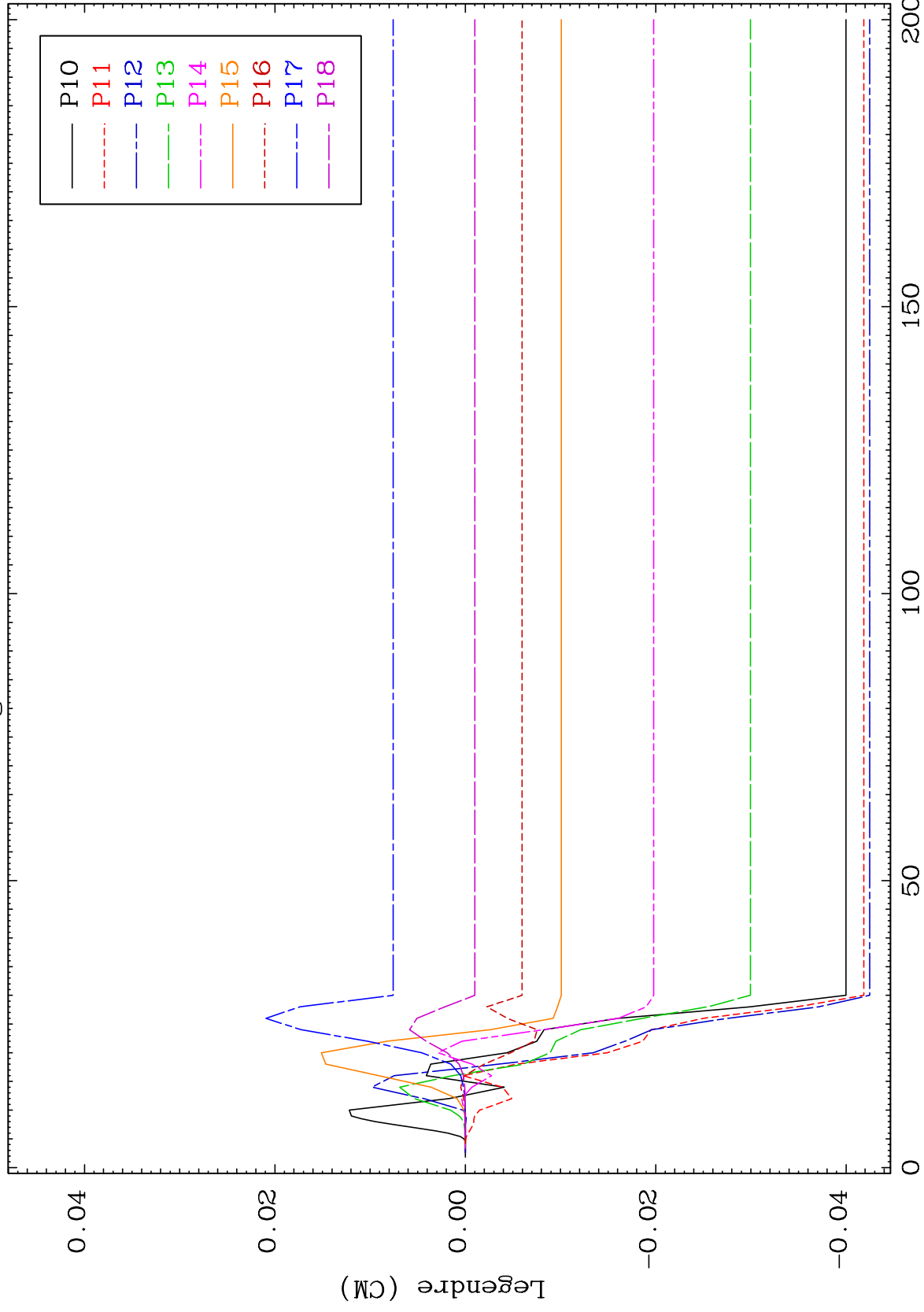
64-Gd-154



MAT 6431

MT= 72 (n,n') Level  
Legendre Coefficients

64-Gd-154



99

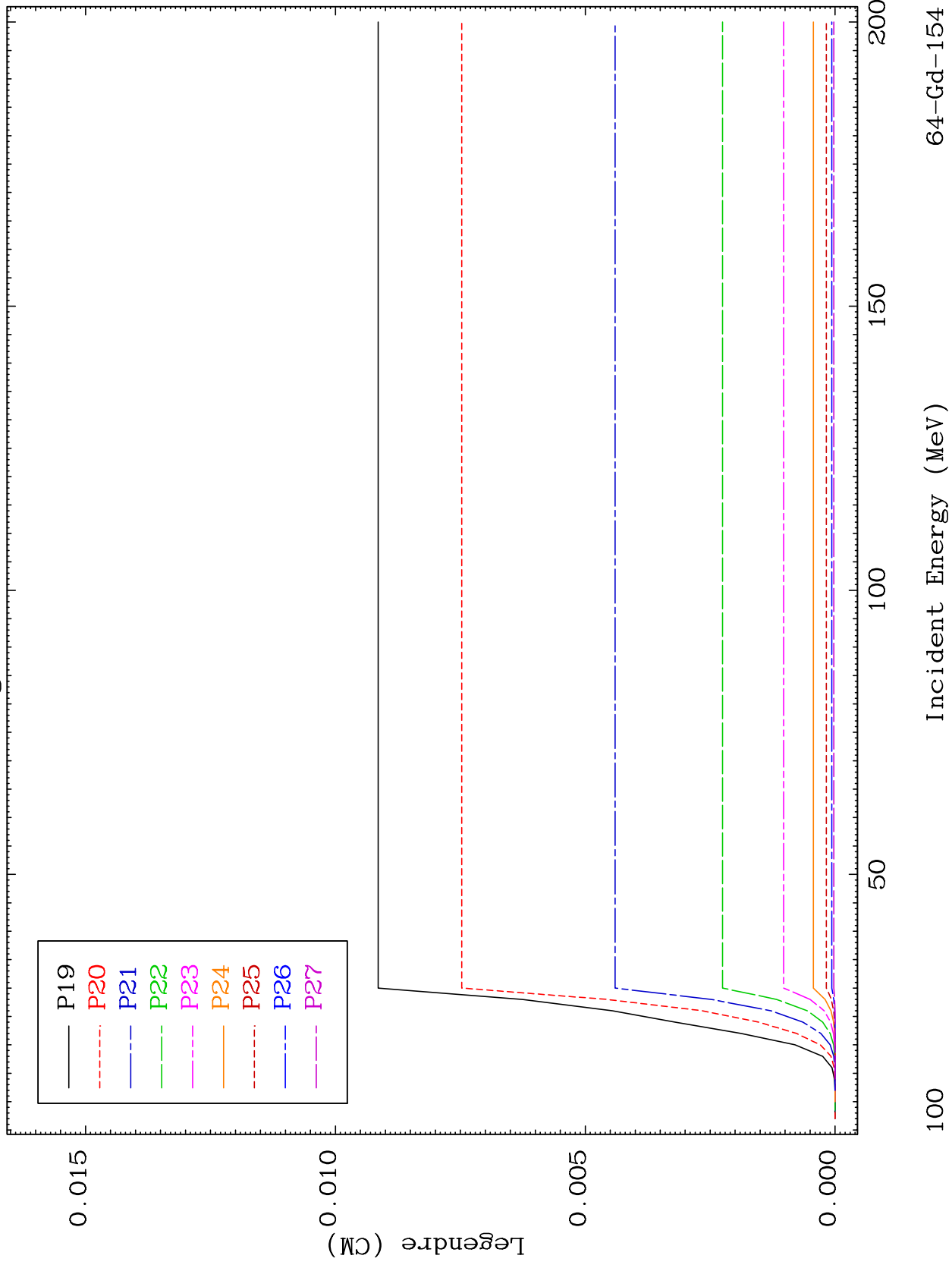
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 72 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

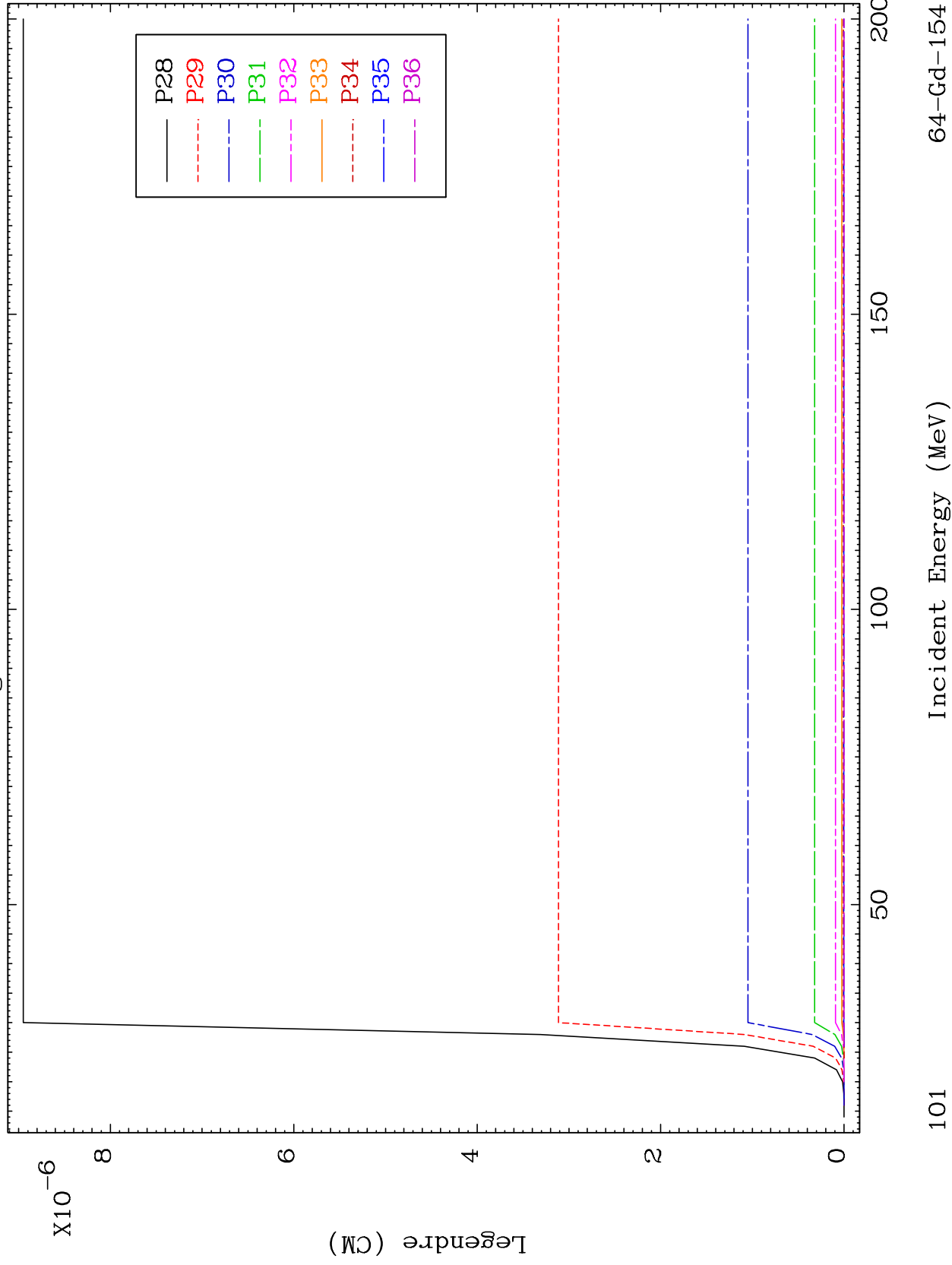
Incident Energy (MeV)

100

MAT 6431

MT= 72 (n,n') Level  
Legendre Coefficients

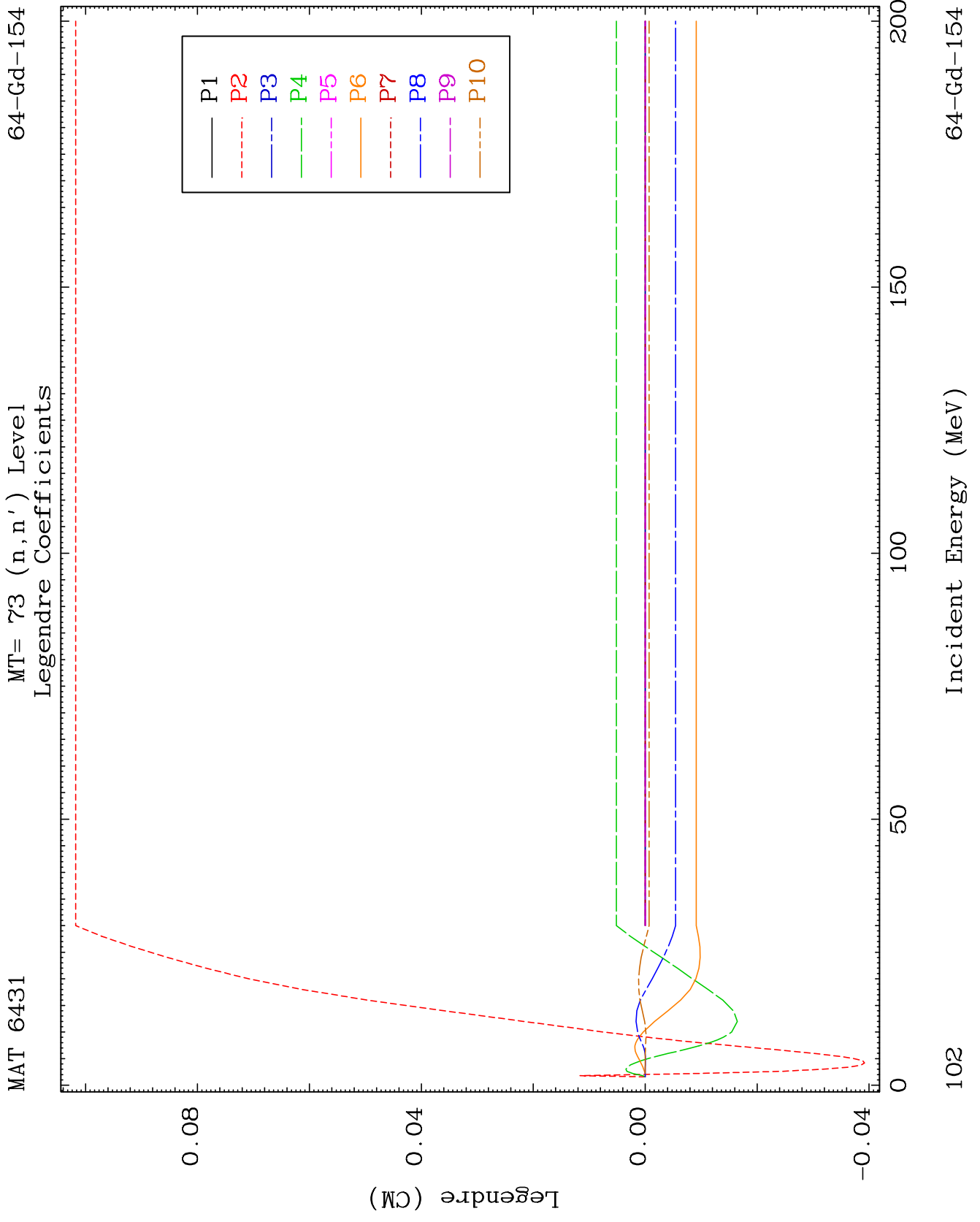
64-Gd-154



101

Incident Energy (MeV)

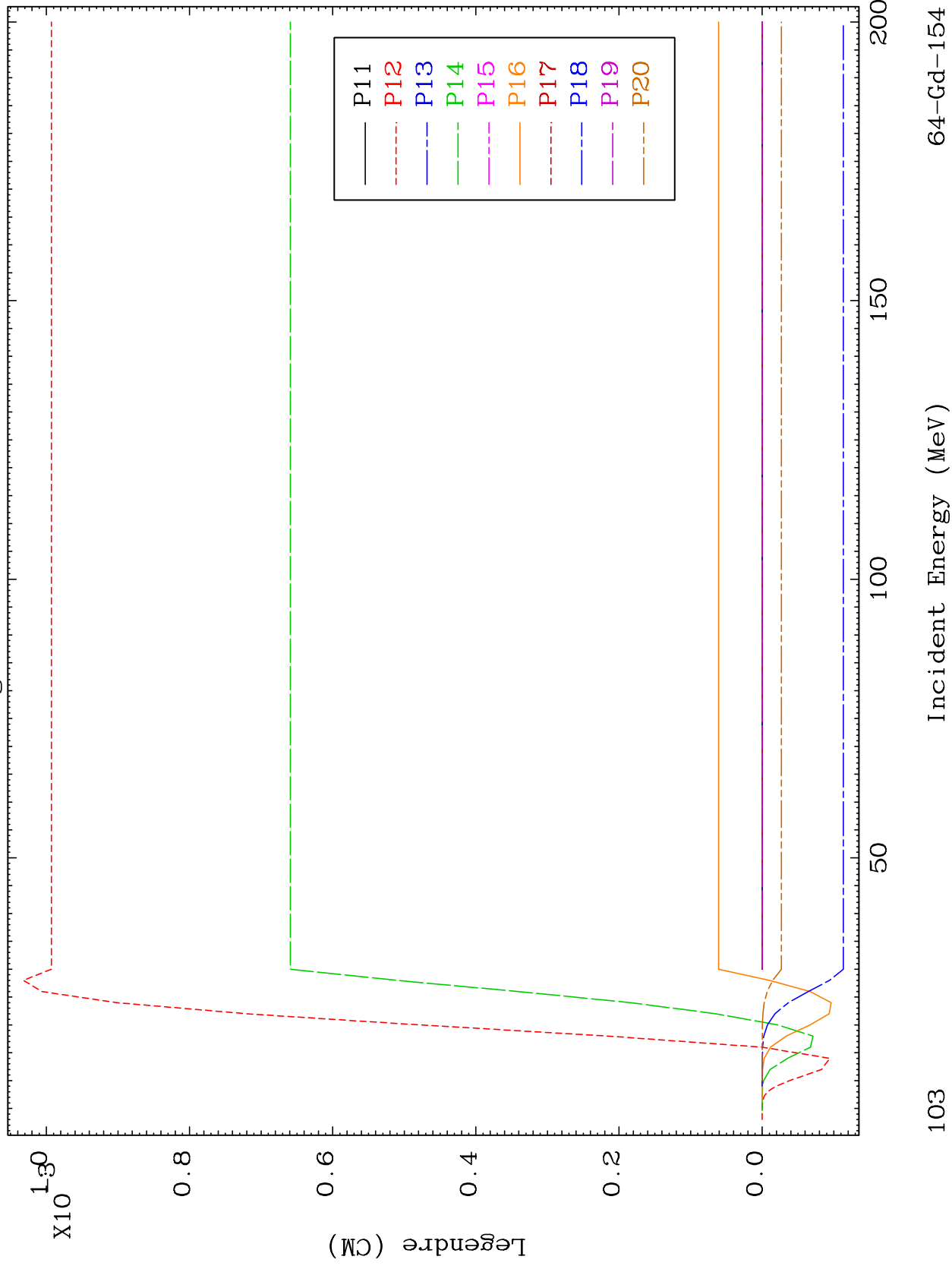
64-Gd-154



MAT 6431

MT= 73 (n,n') Level  
Legendre Coefficients

64-Gd-154



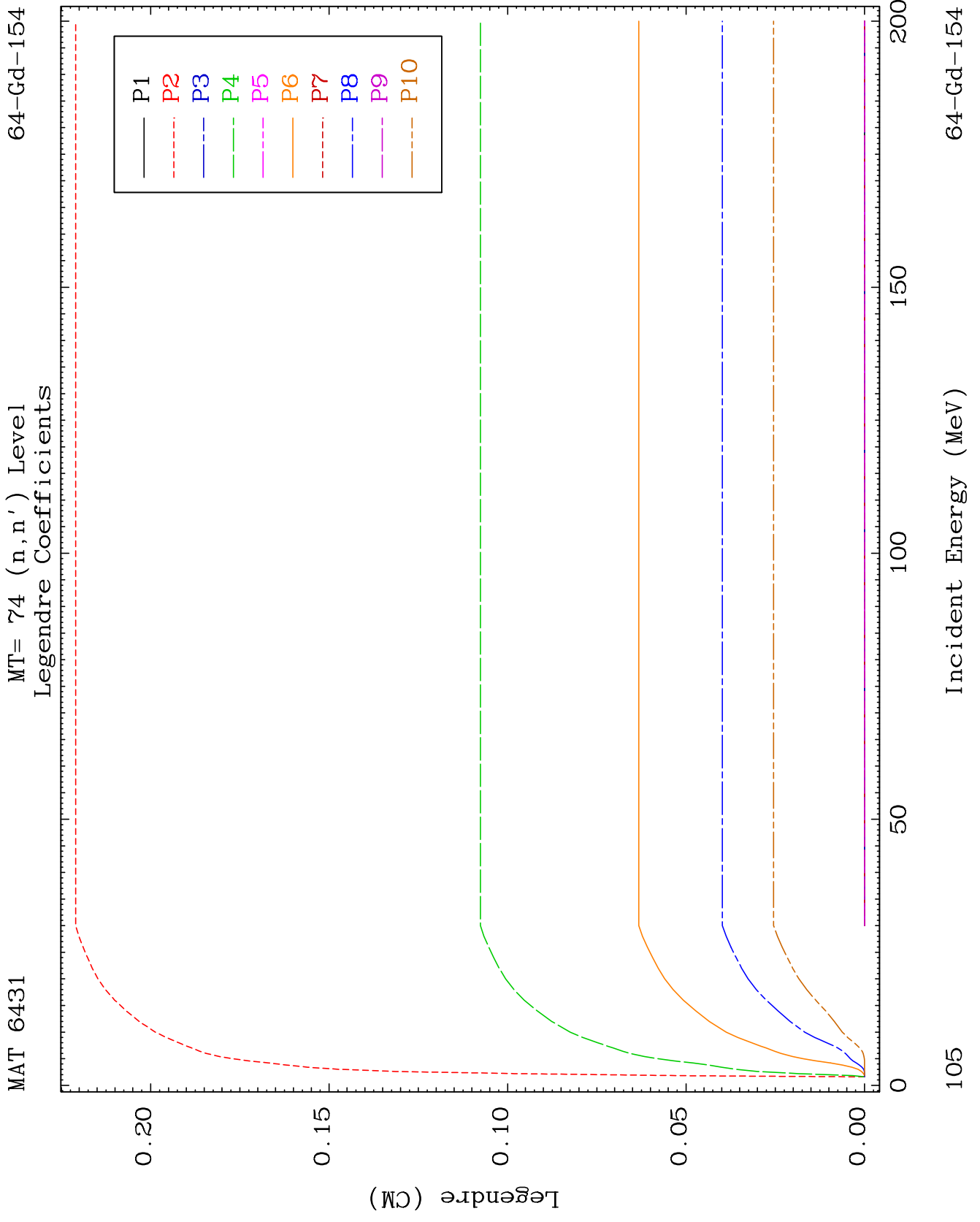
103

Incident Energy (MeV)

64-Gd-154



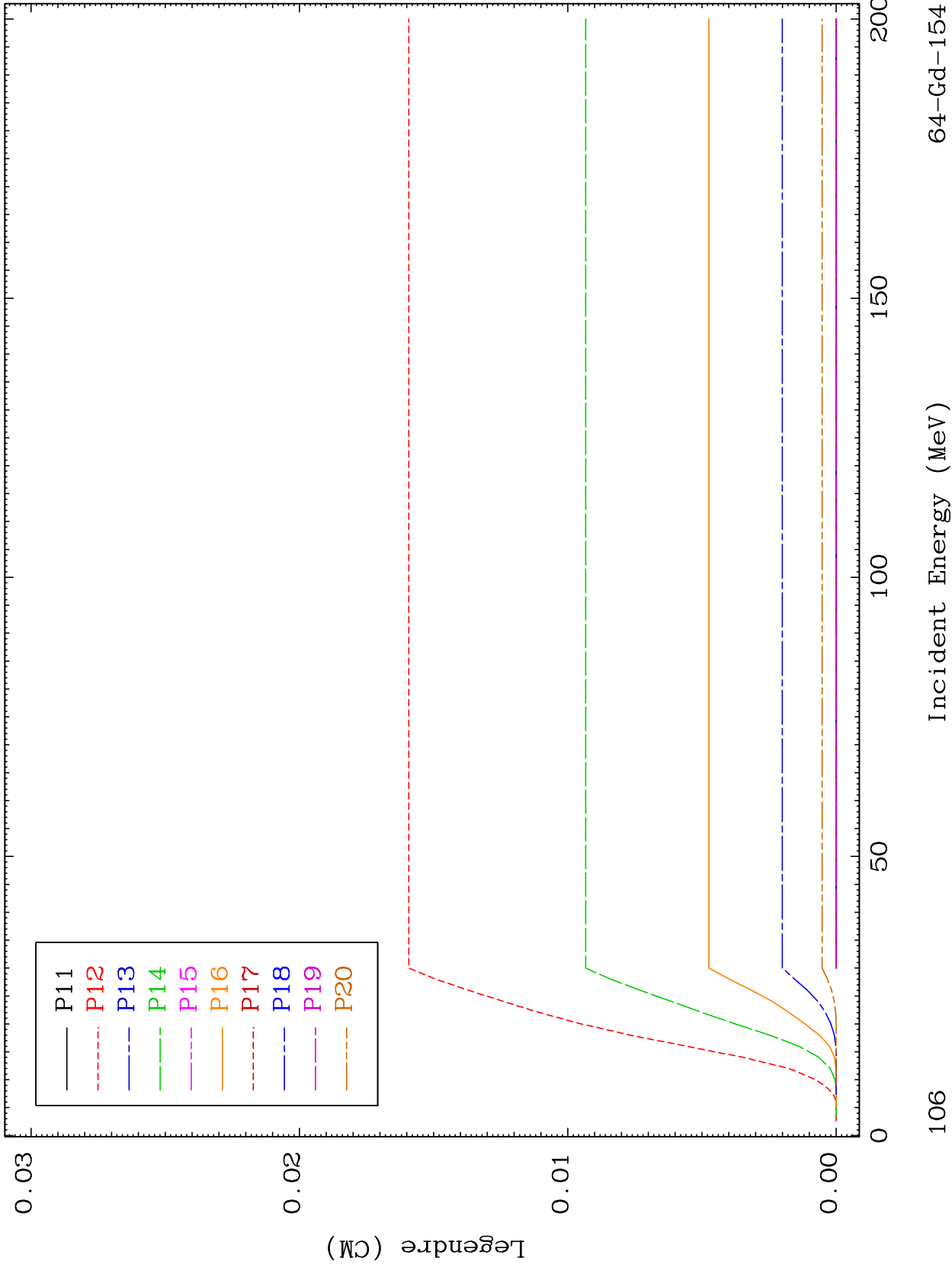




MAT 6431

MT= 74 (n,n') Level  
Legendre Coefficients

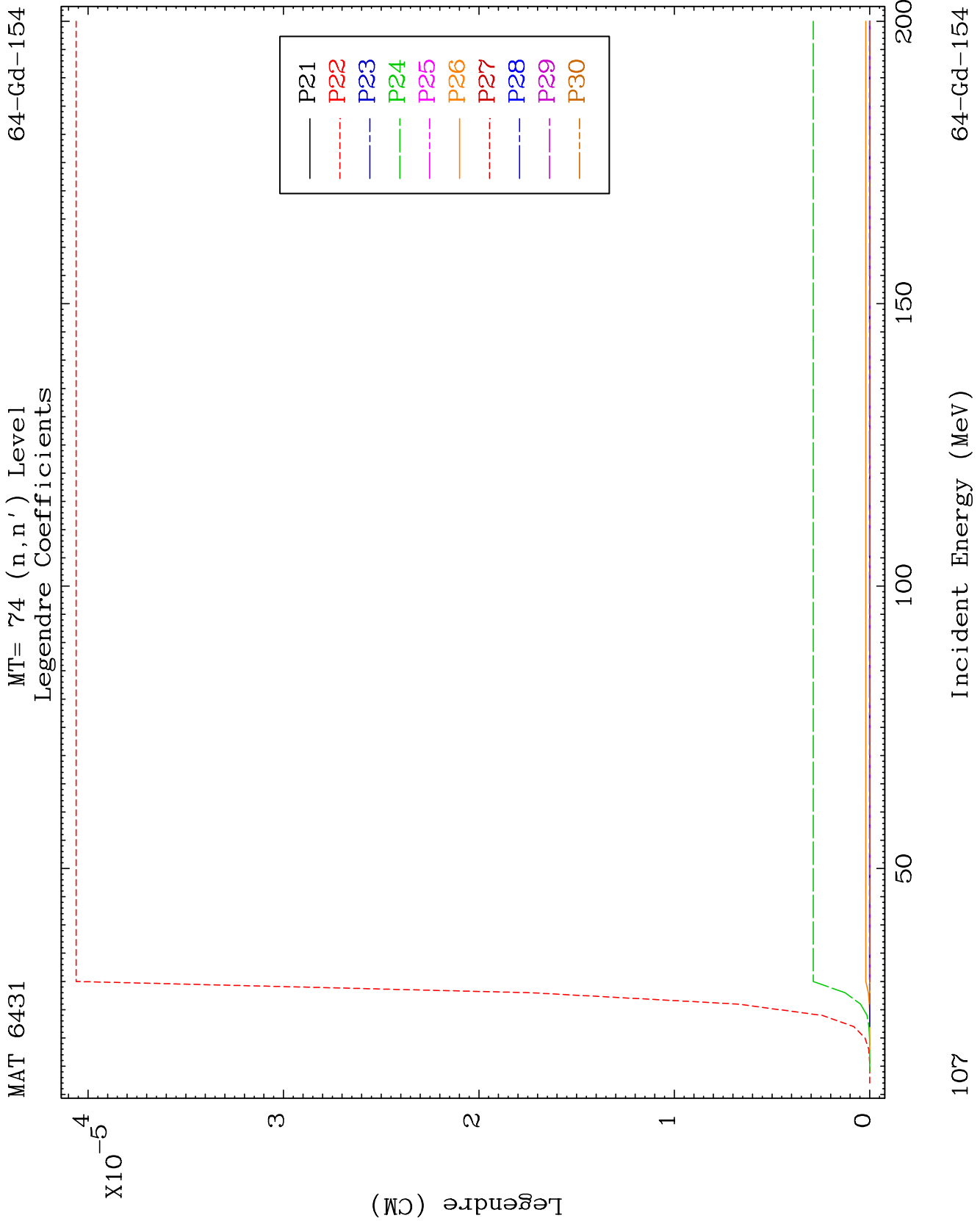
64-Gd-154



64-Gd-154

Incident Energy (MeV)

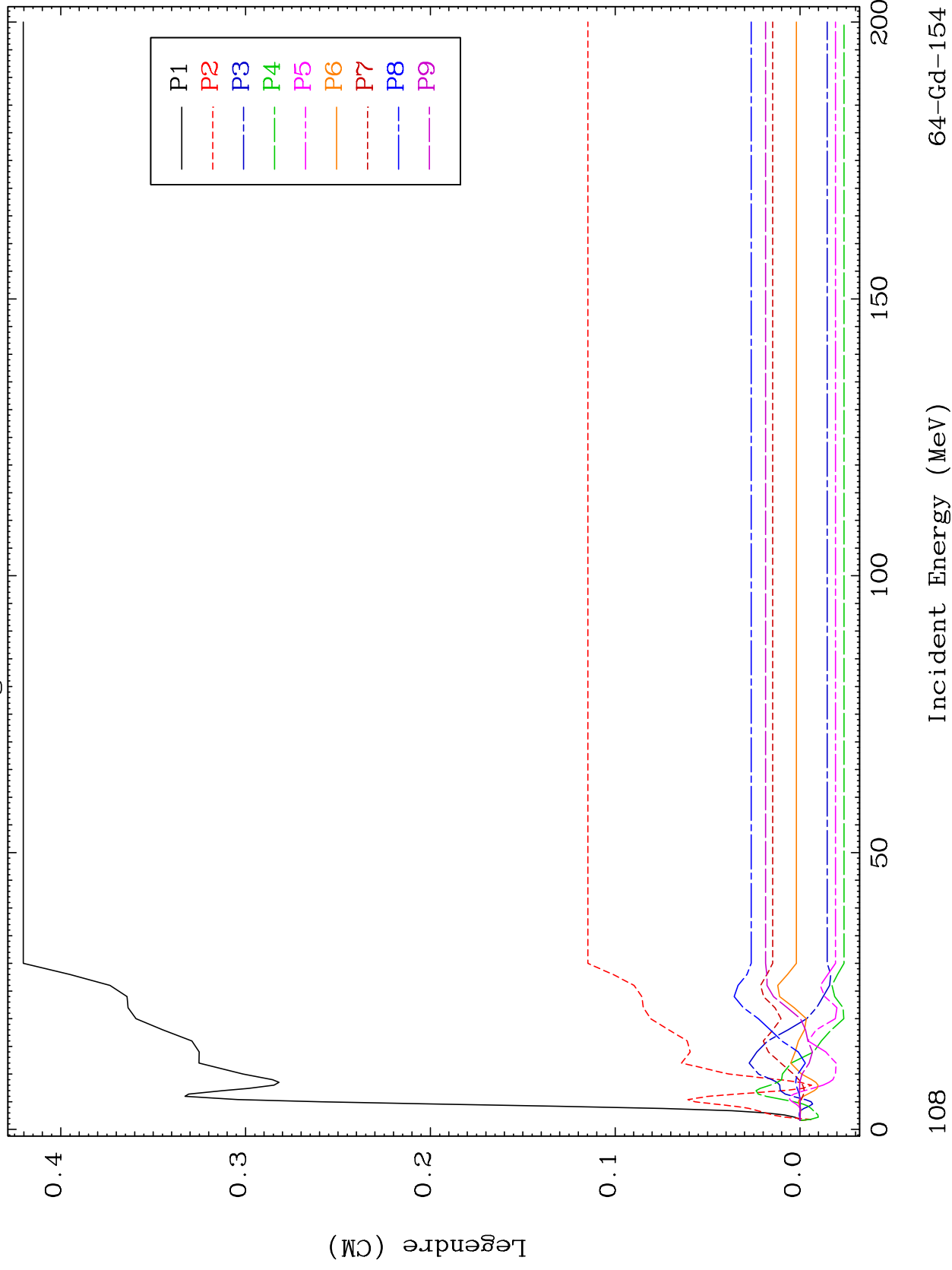
106



MAT 6431

MT= 75 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

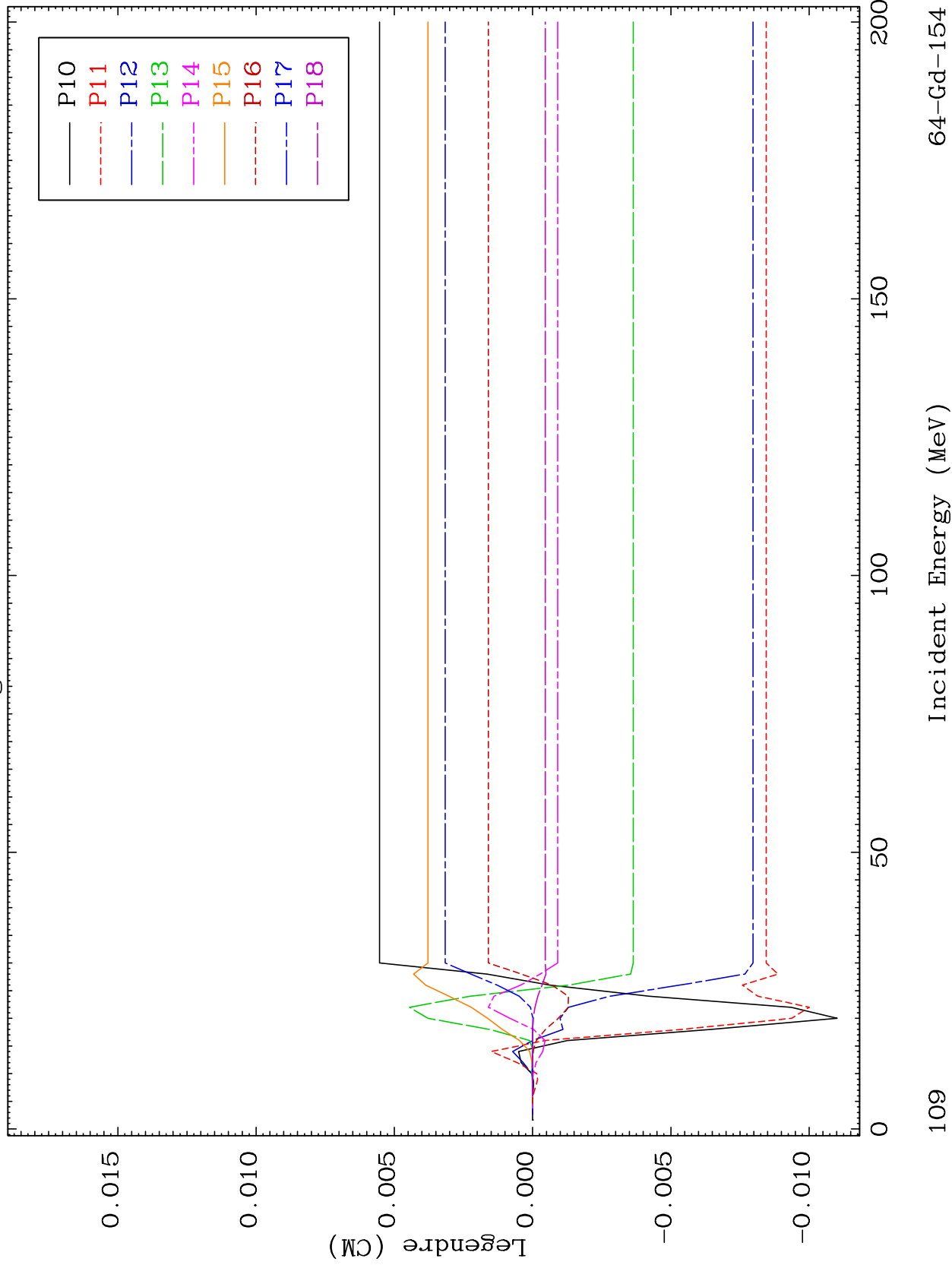
Incident Energy (MeV)

108

MAT 6431

MT= 75 (n,n') Level  
Legendre Coefficients

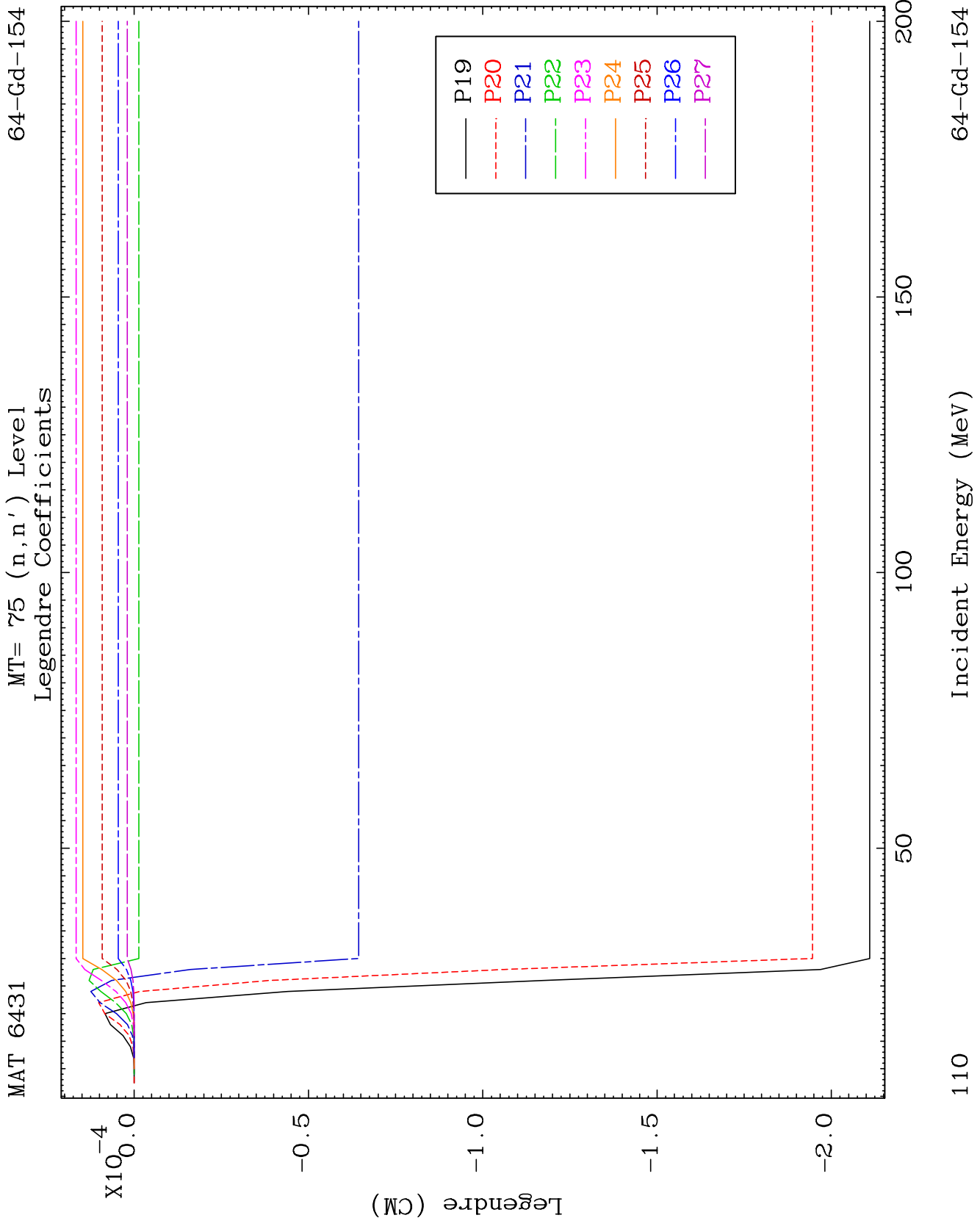
64-Gd-154



64-Gd-154

Incident Energy (MeV)

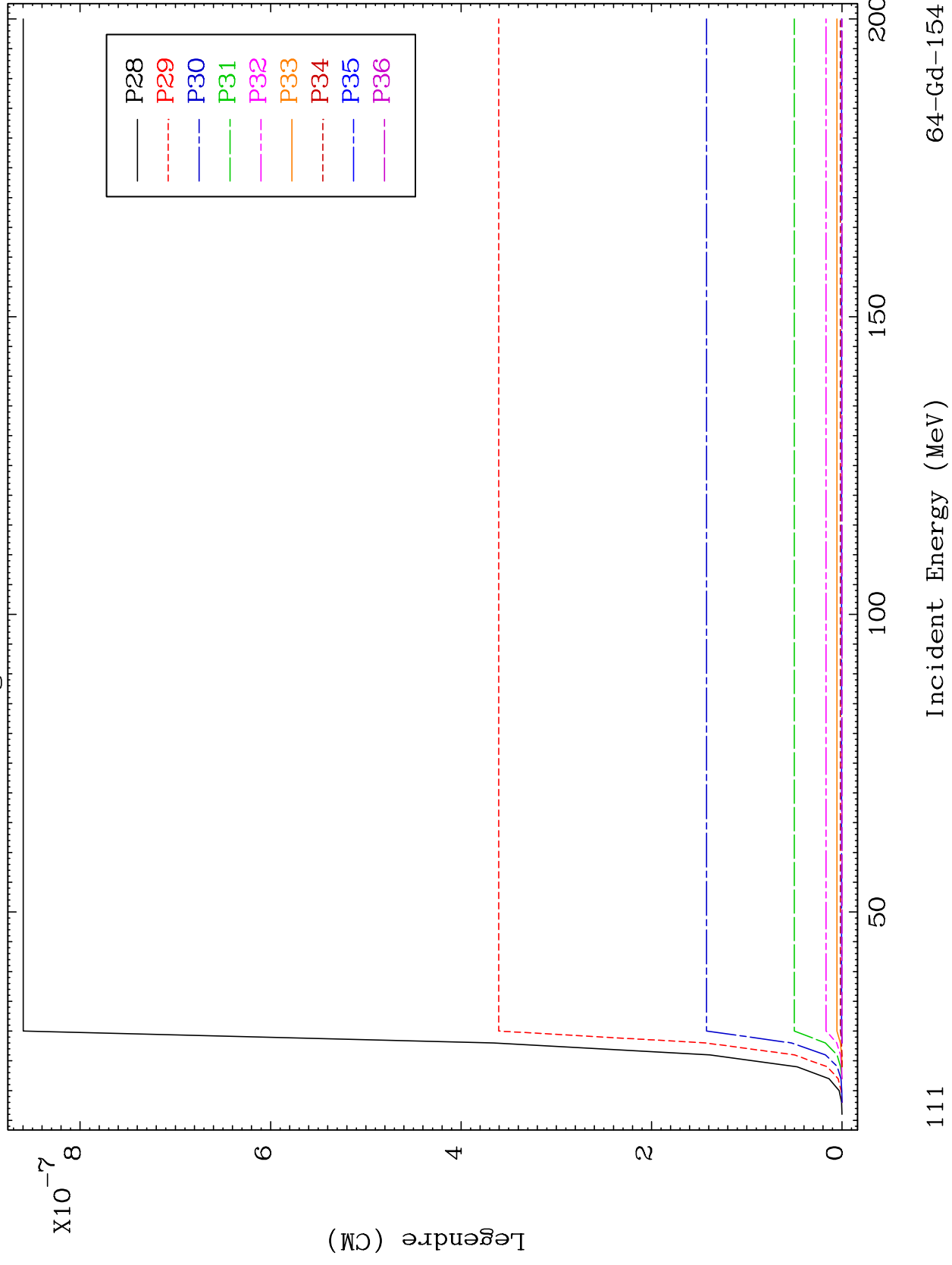
109



MAT 6431

MT= 75 (n,n') Level  
Legendre Coefficients

64-Gd-154



111

Incident Energy (MeV)

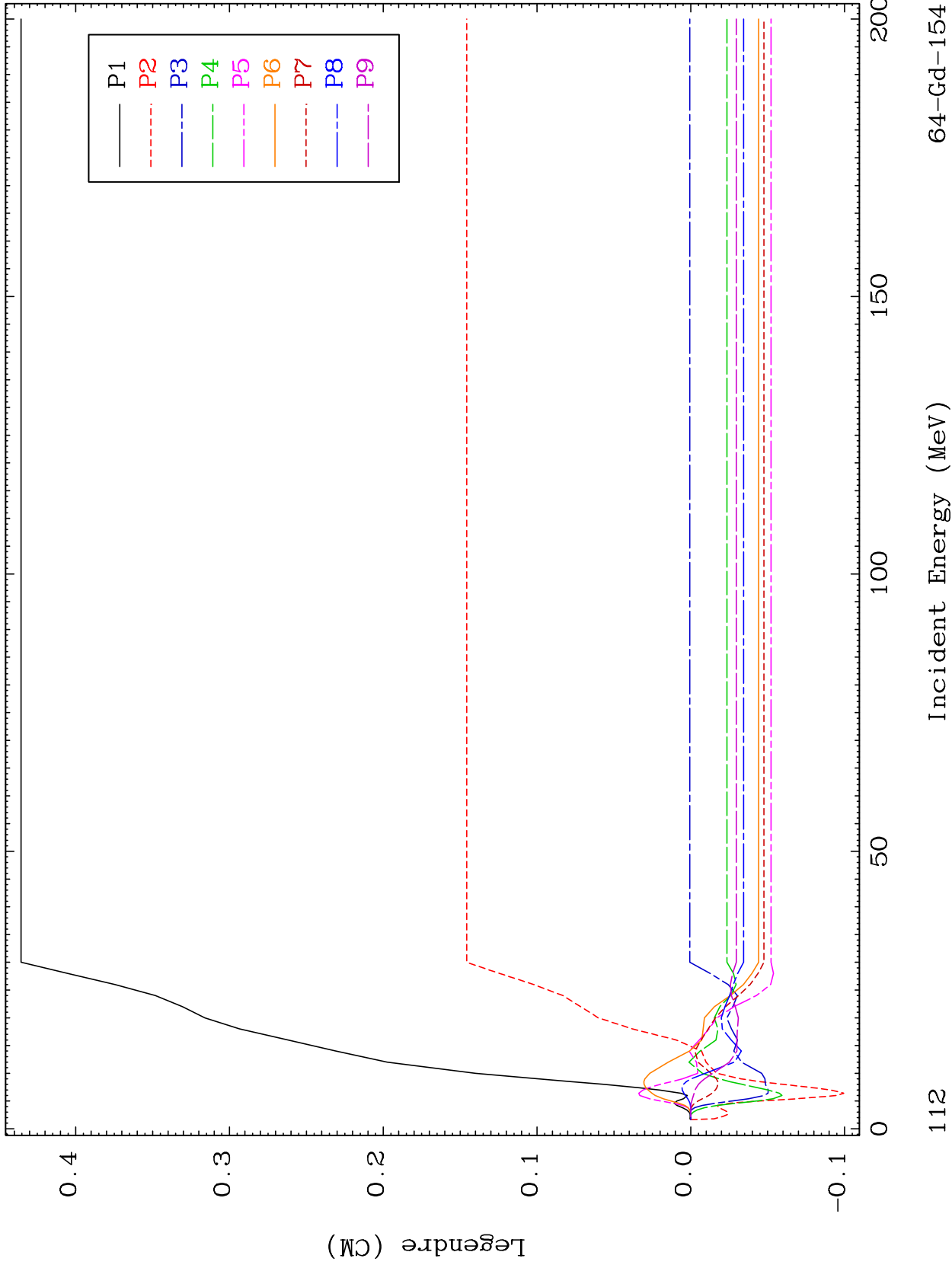
64-Gd-154



MAT 6431

MT= 76 (n,n') Level  
Legendre Coefficients

64-Gd-154

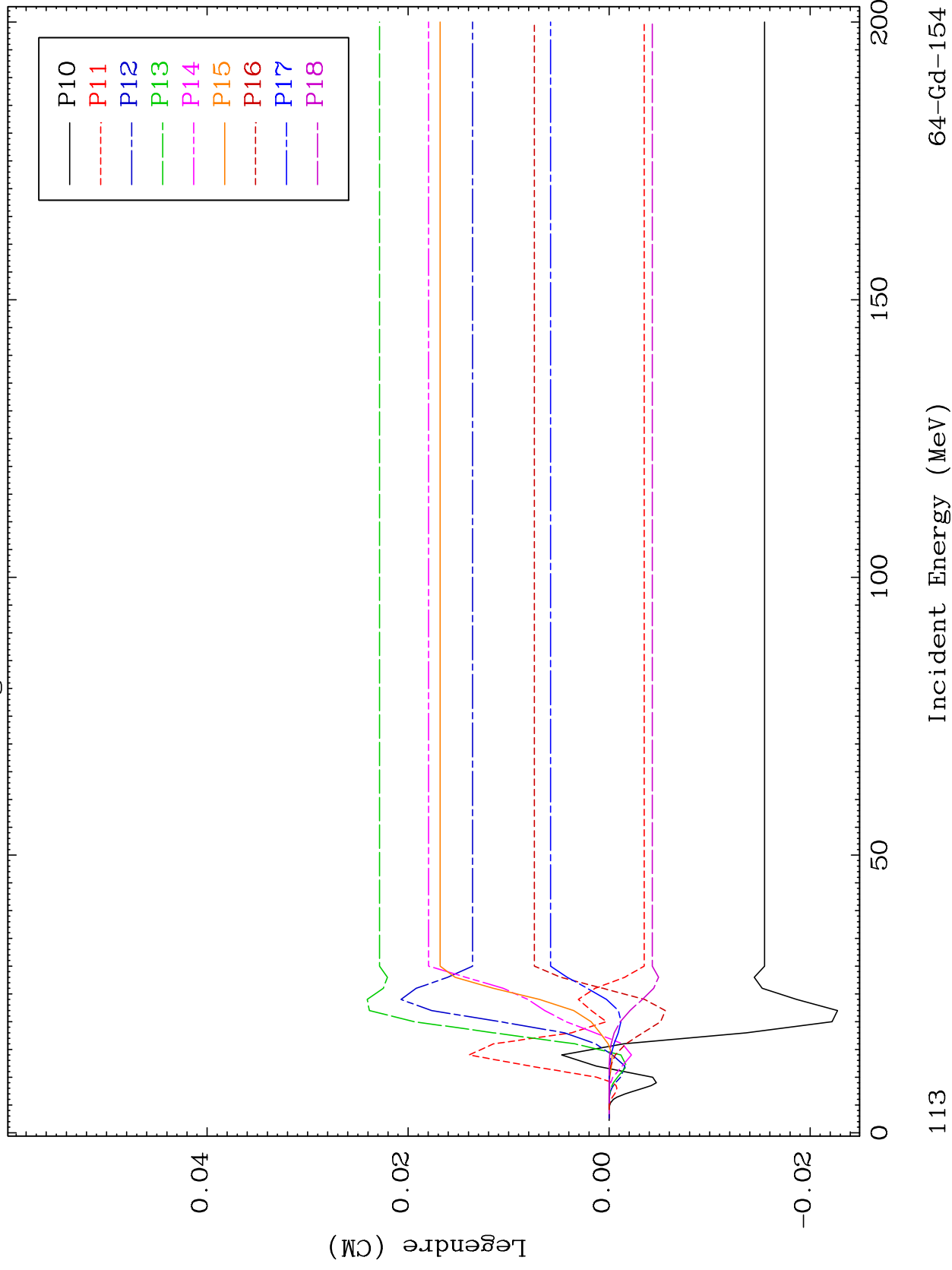


64-Gd-154

MAT 6431

MT= 76 (n,n') Level  
Legendre Coefficients

64-Gd-154



113

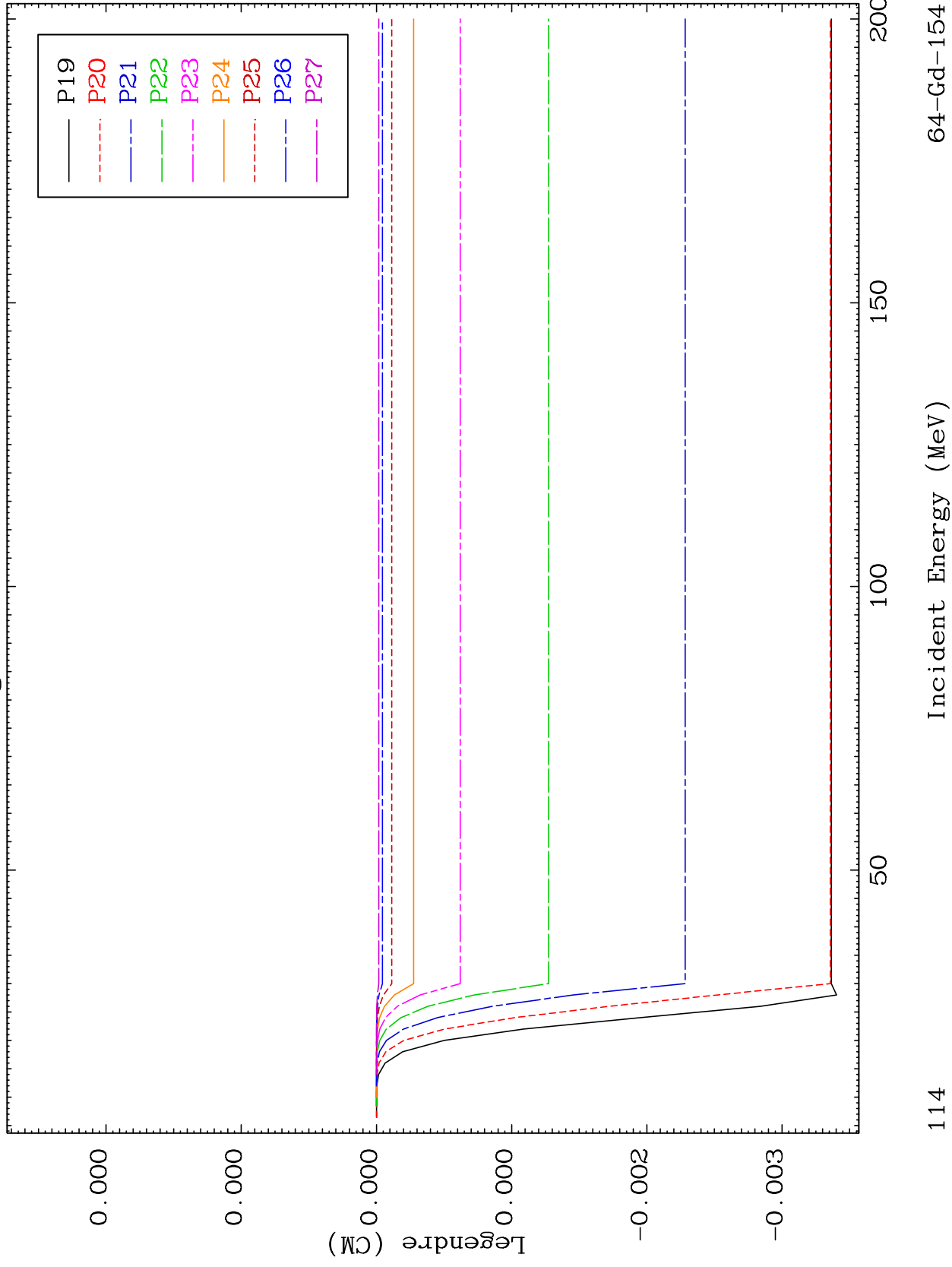
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 76 (n,n') Level  
Legendre Coefficients

64-Gd-154

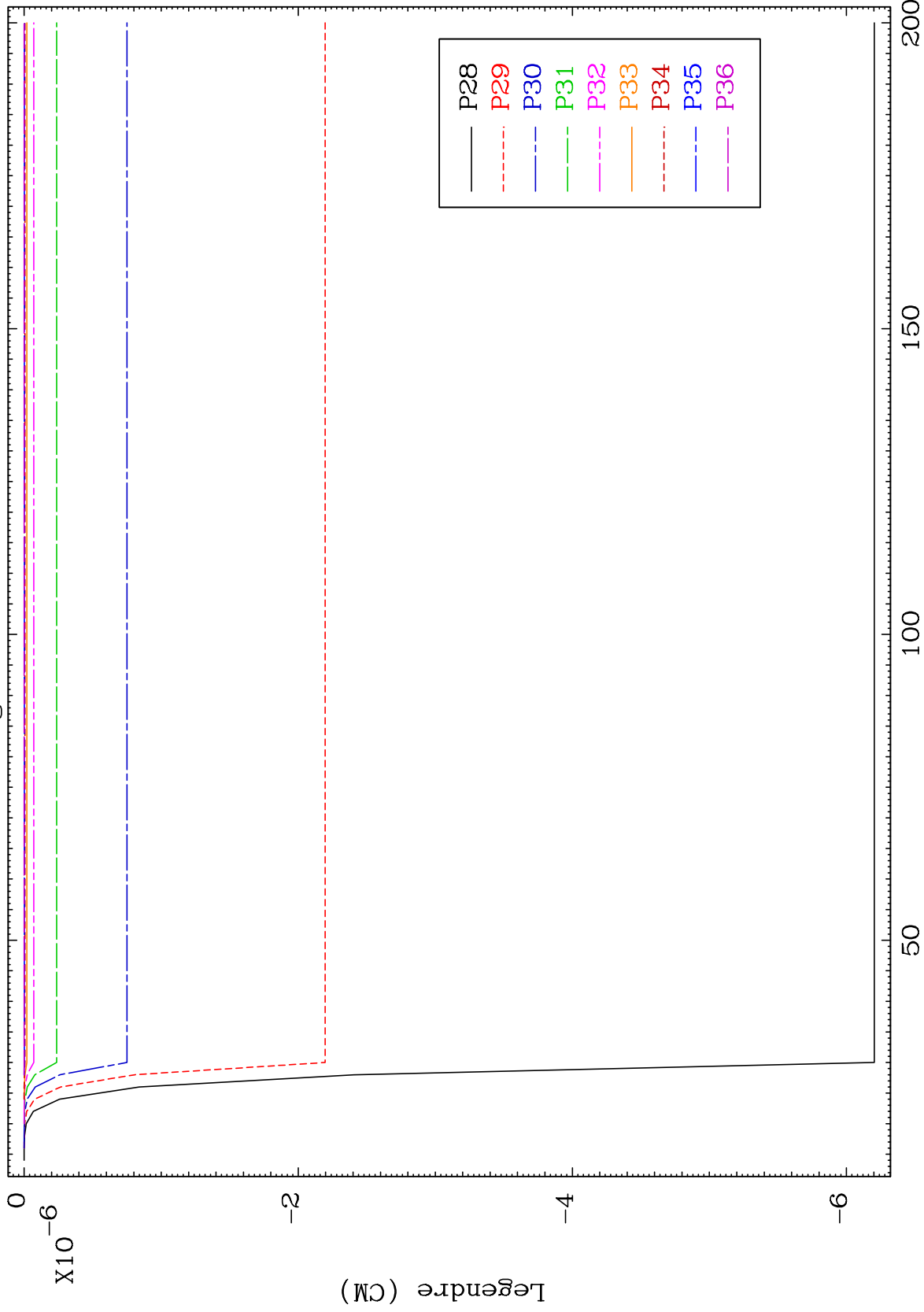


114

MAT 6431

MT= 76 (n,n') Level  
Legendre Coefficients

64-Gd-154



115

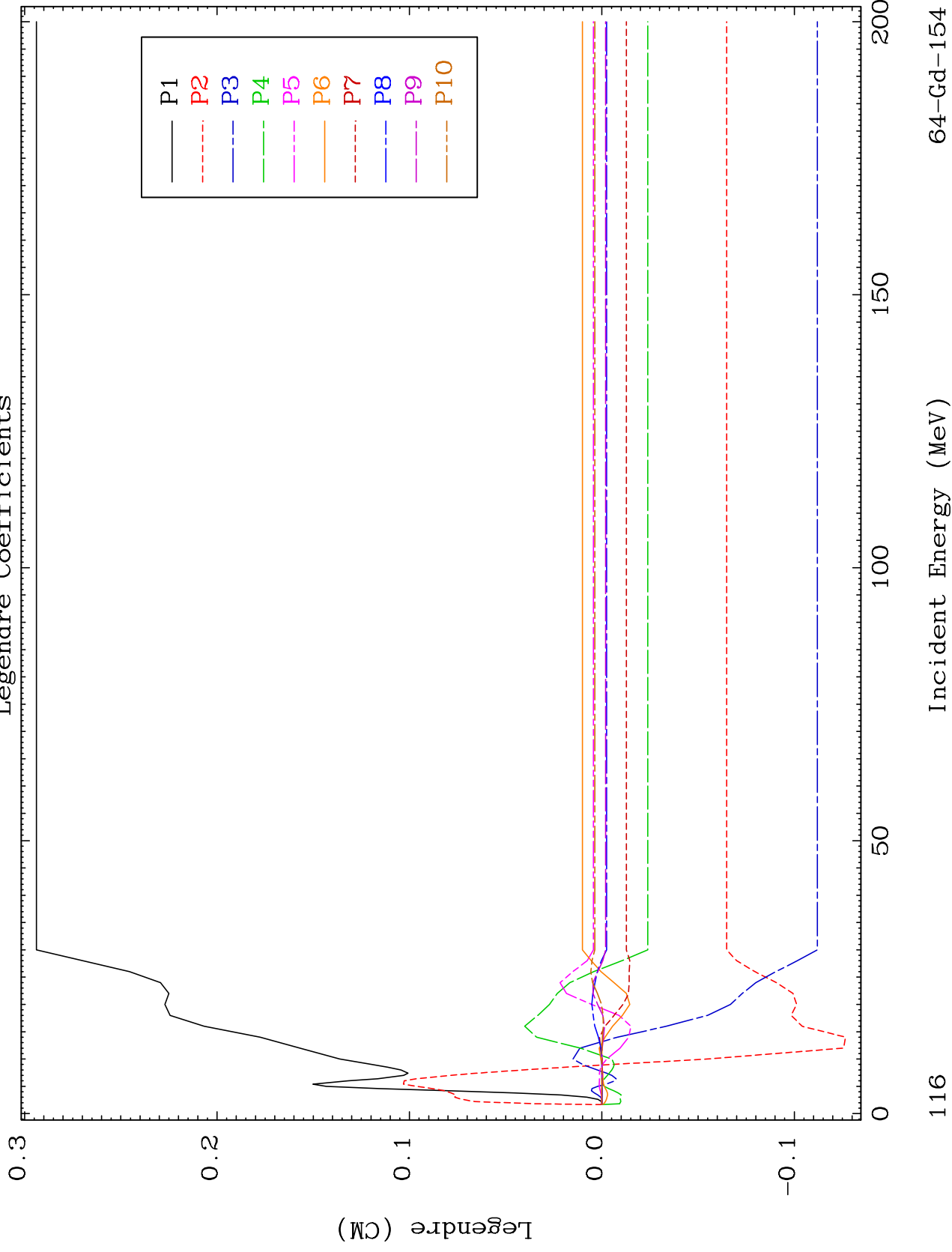
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 77 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

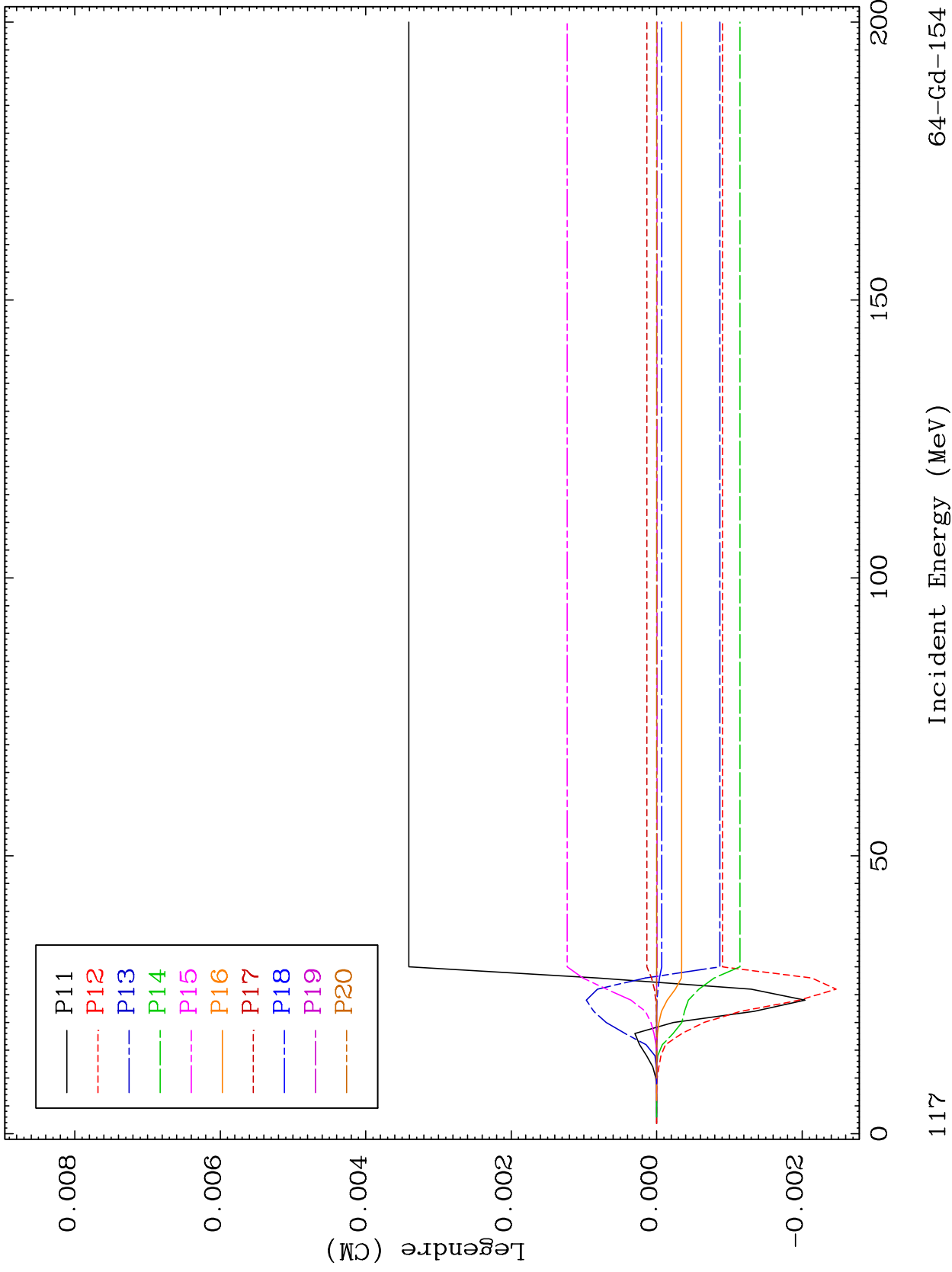
Incident Energy (MeV)

116

MAT 6431

MT= 77 (n,n') Level  
Legendre Coefficients

64-Gd-154



117

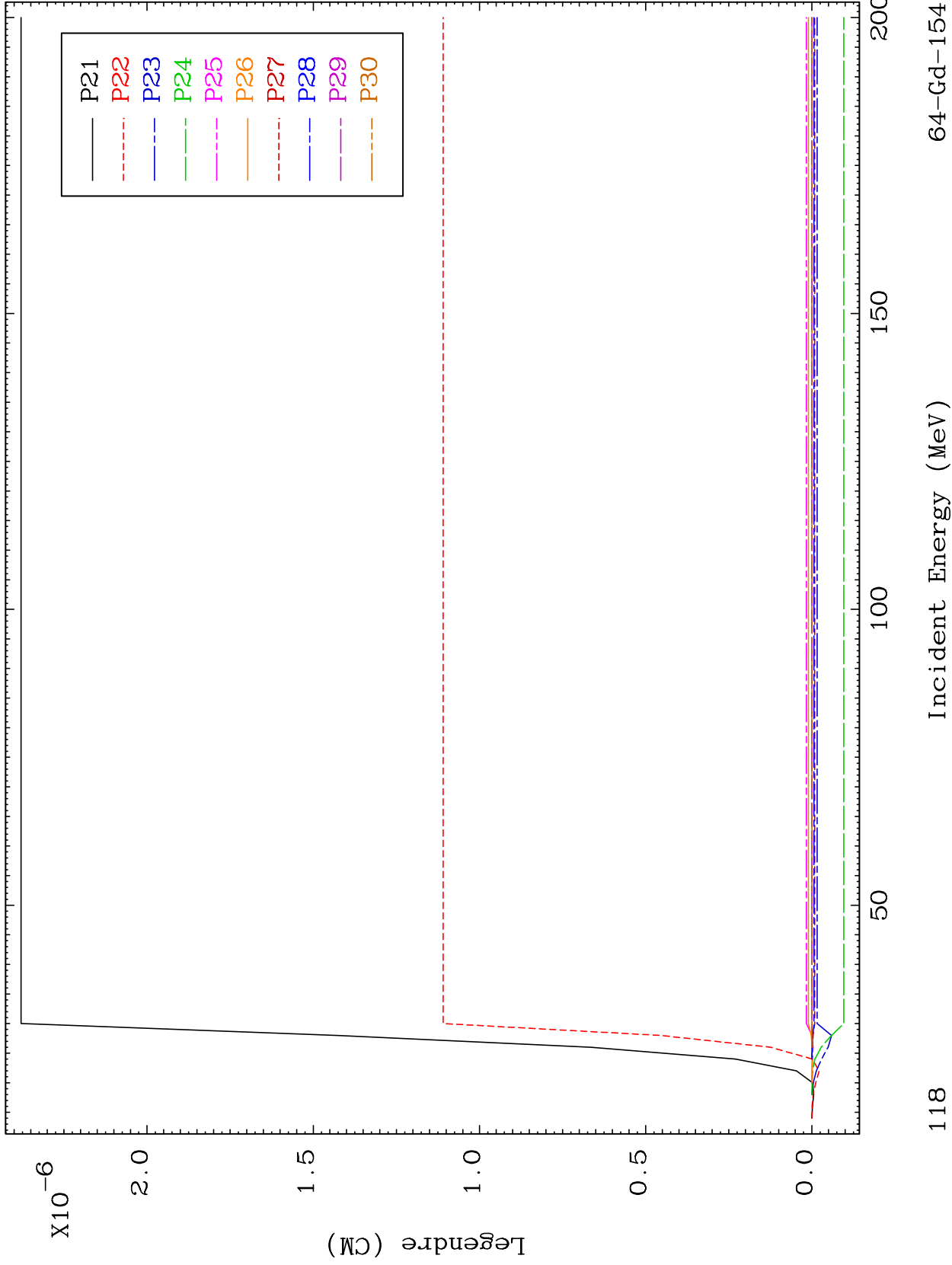
Incident Energy (MeV)

64-Gd-154

MAT 6431

MT= 77 (n,n') Level  
Legendre Coefficients

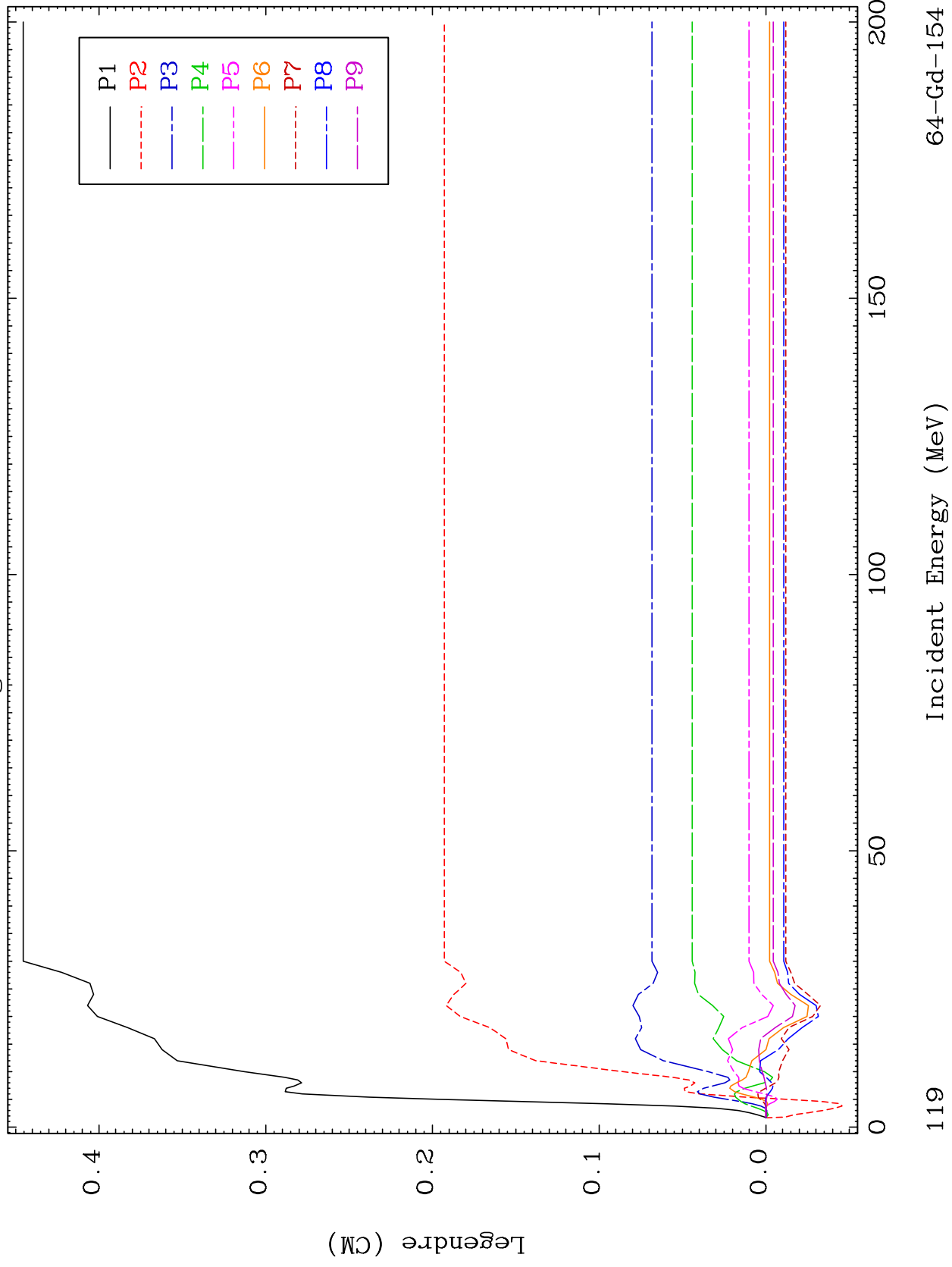
64-Gd-154



MAT 6431

MT= 78 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

Incident Energy (MeV)

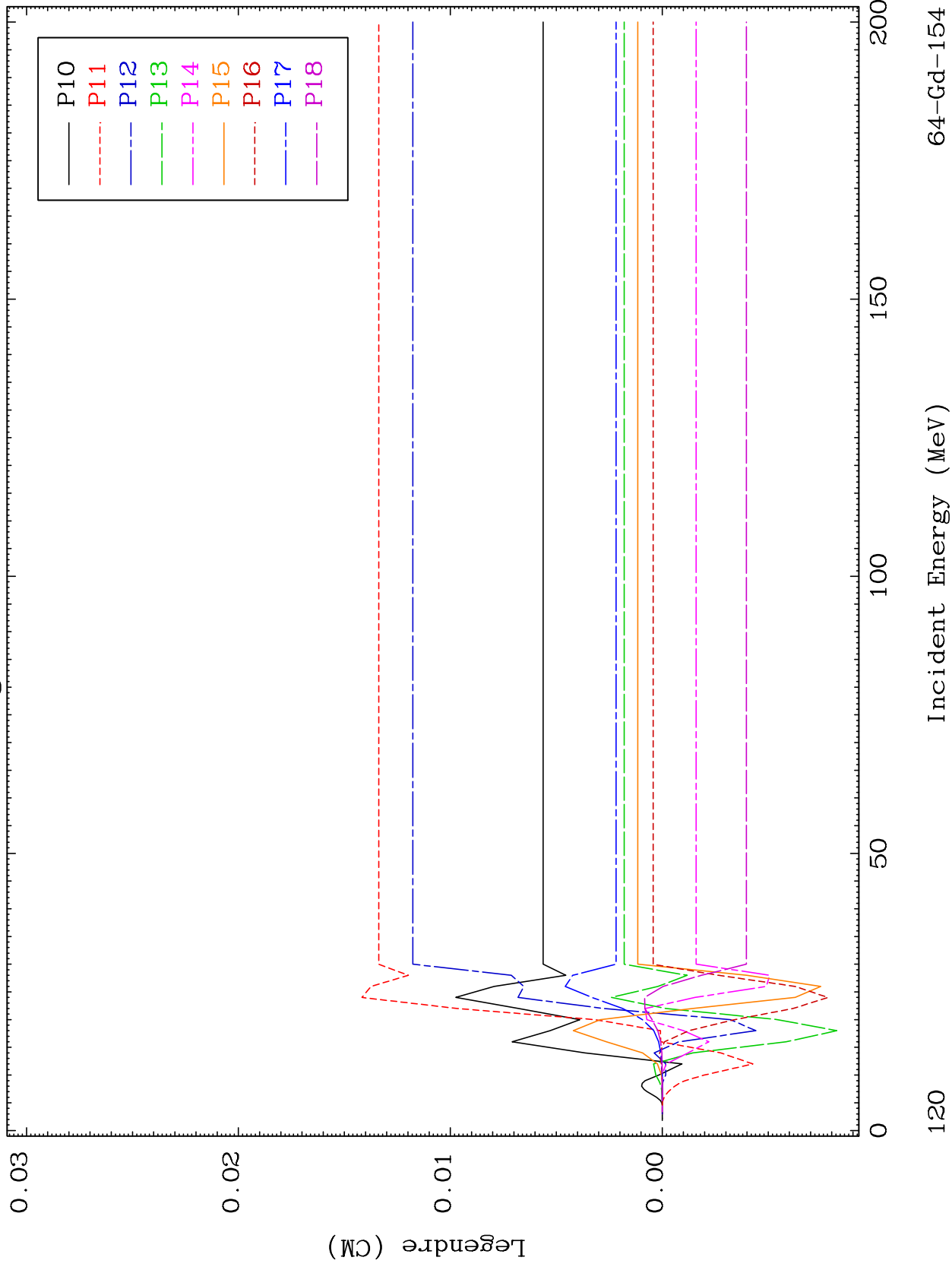
119



MAT 6431

MT= 78 (n,n') Level  
Legendre Coefficients

64-Gd-154



64-Gd-154

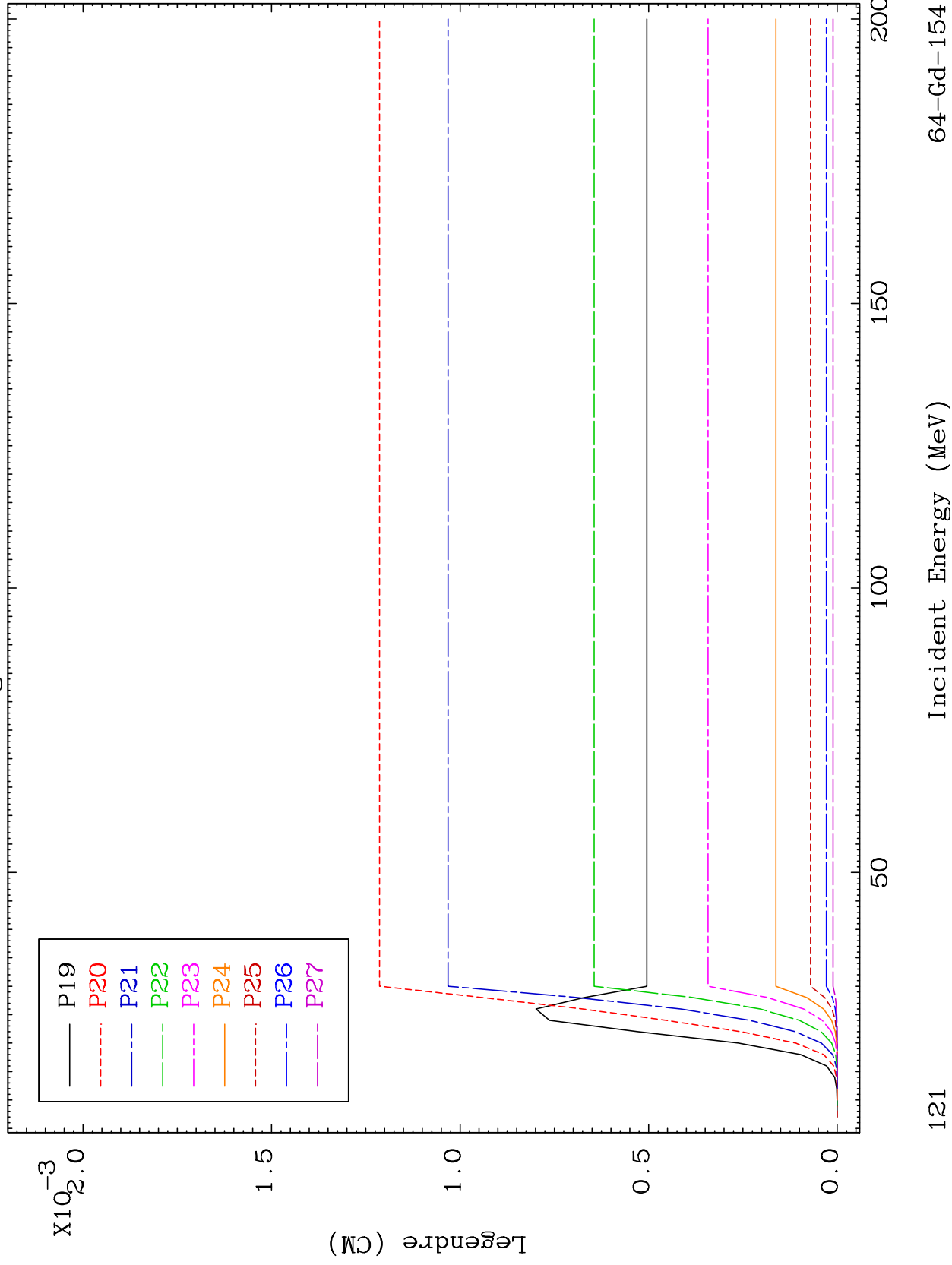
Incident Energy (MeV)

120

MAT 6431

MT= 78 (n,n') Level  
Legendre Coefficients

64-Gd-154

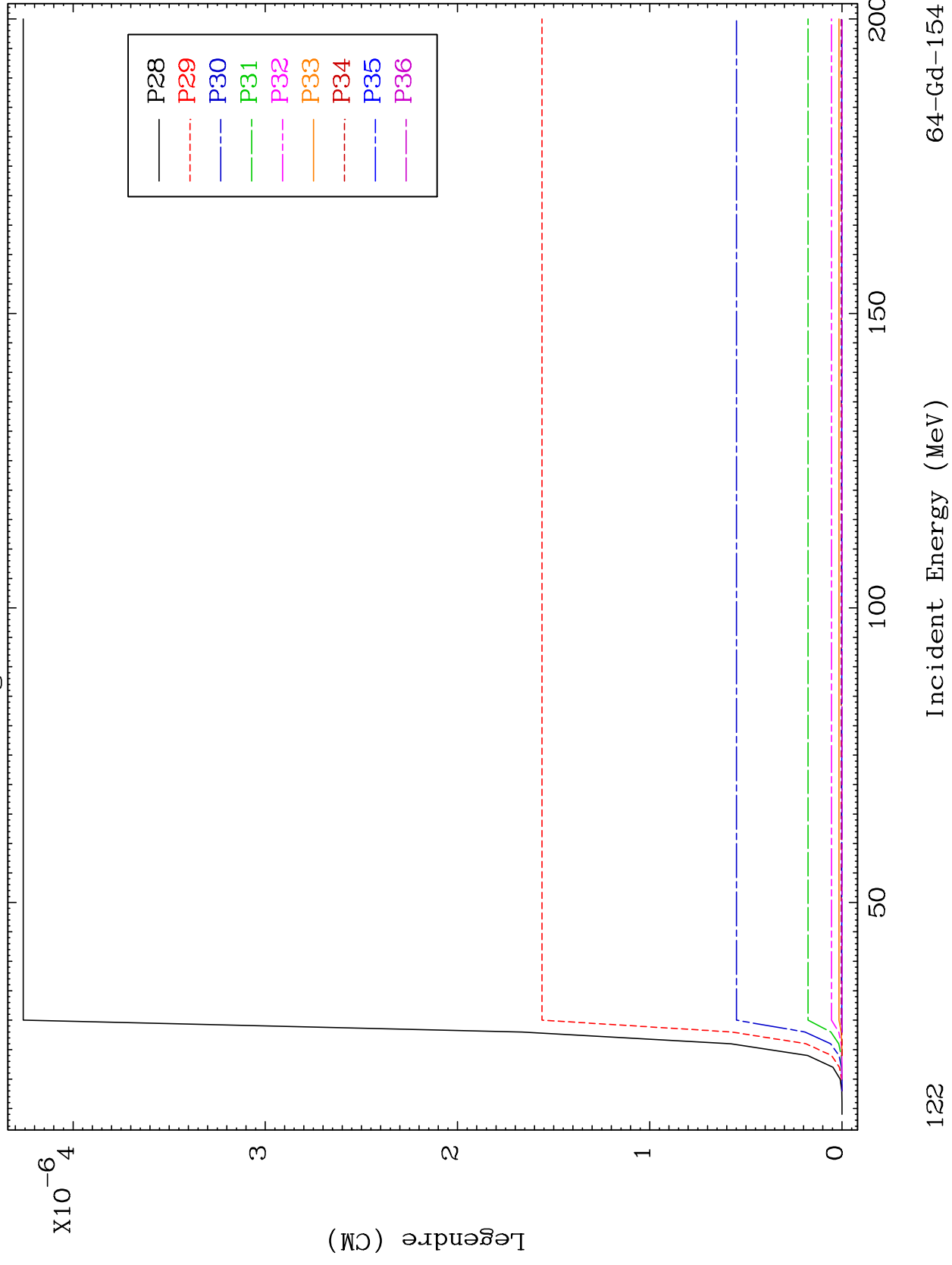


121

MAT 6431

MT= 78 (n,n') Level  
Legendre Coefficients

64-Gd-154



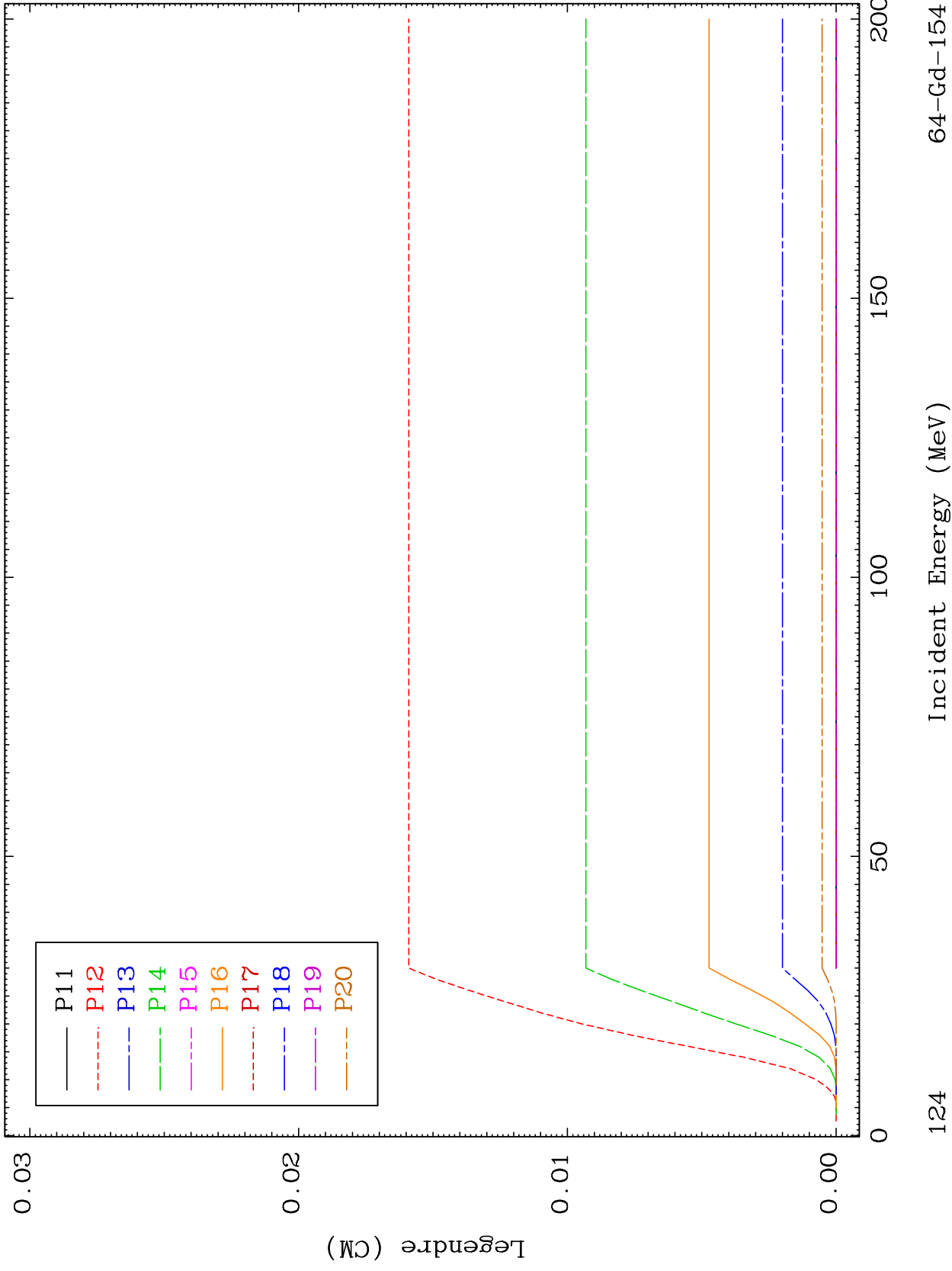
122



MAT 6431

MT= 79 (n,n') Level  
Legendre Coefficients

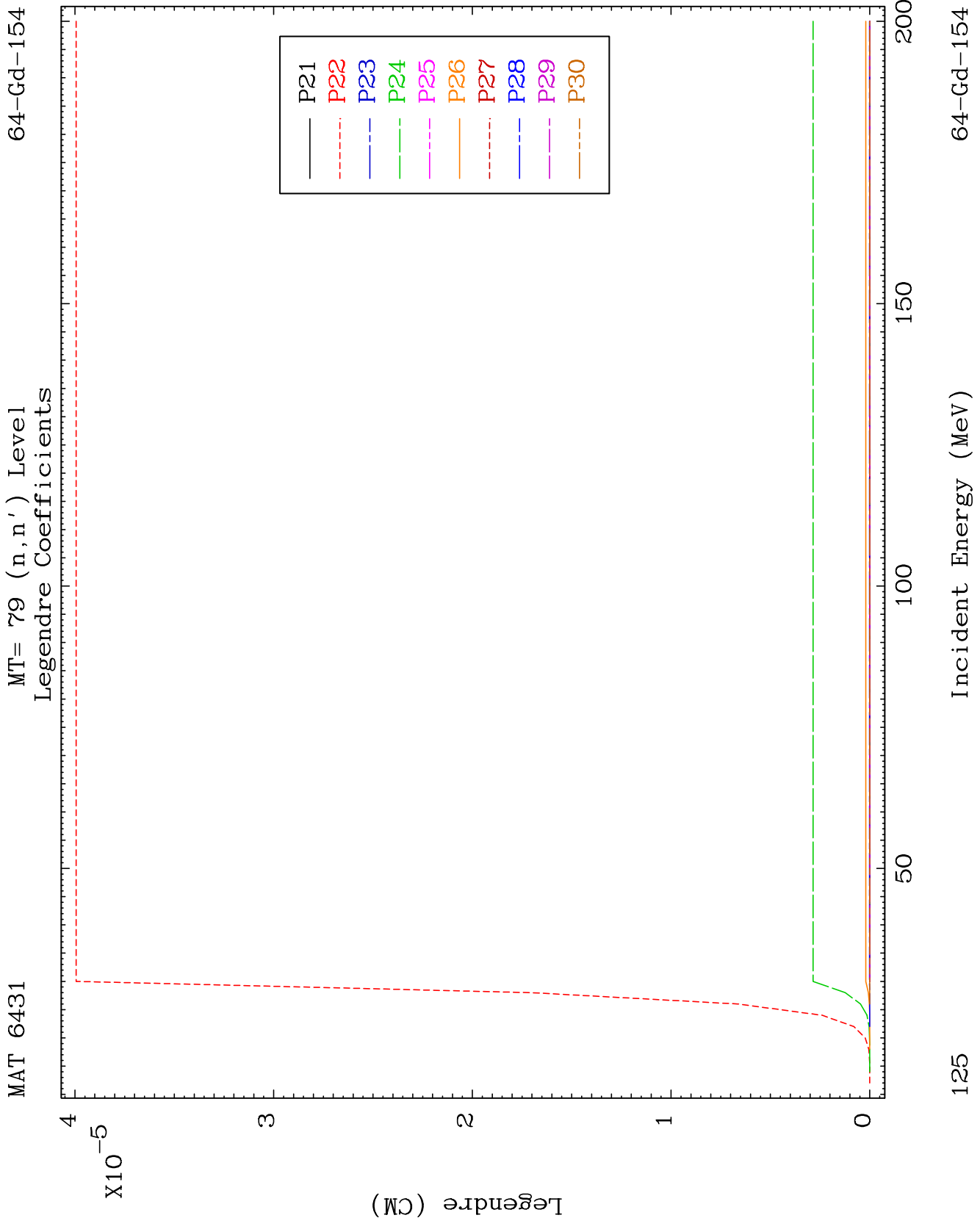
64-Gd-154



124

Incident Energy (MeV)

64-Gd-154



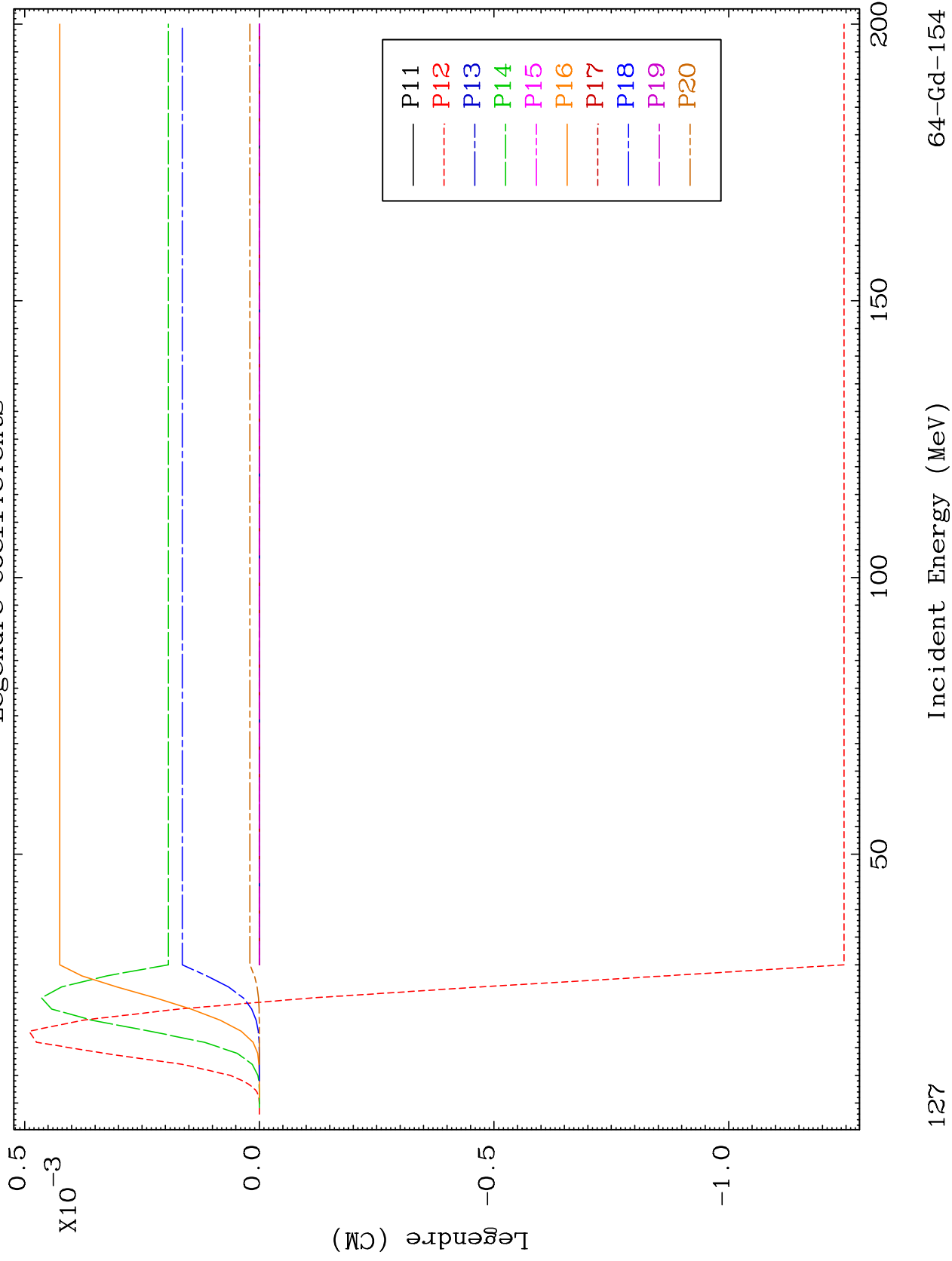


MAT 6431

MT= 80 (n,n') Level

64-Gd-154

Legendre Coefficients

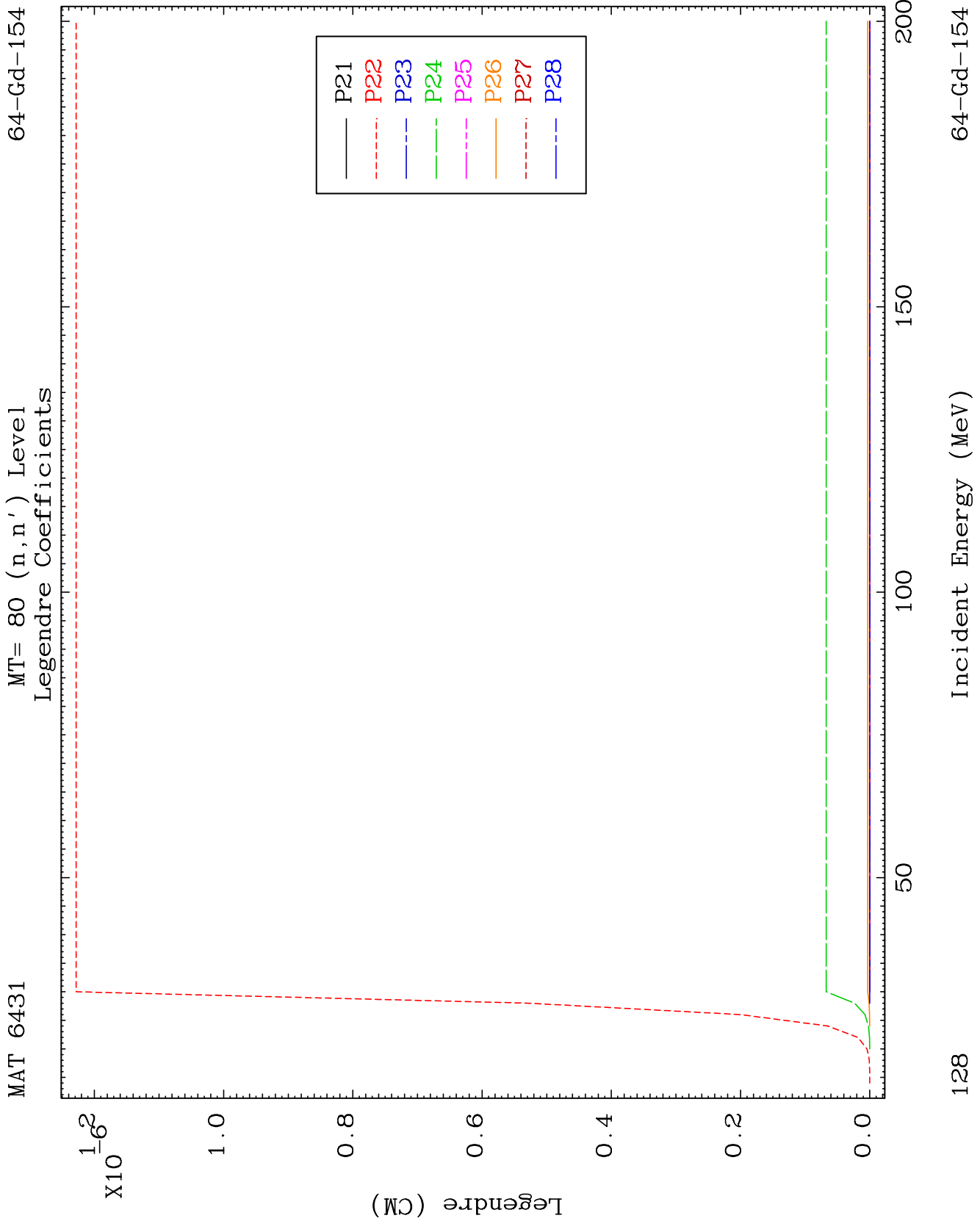


127

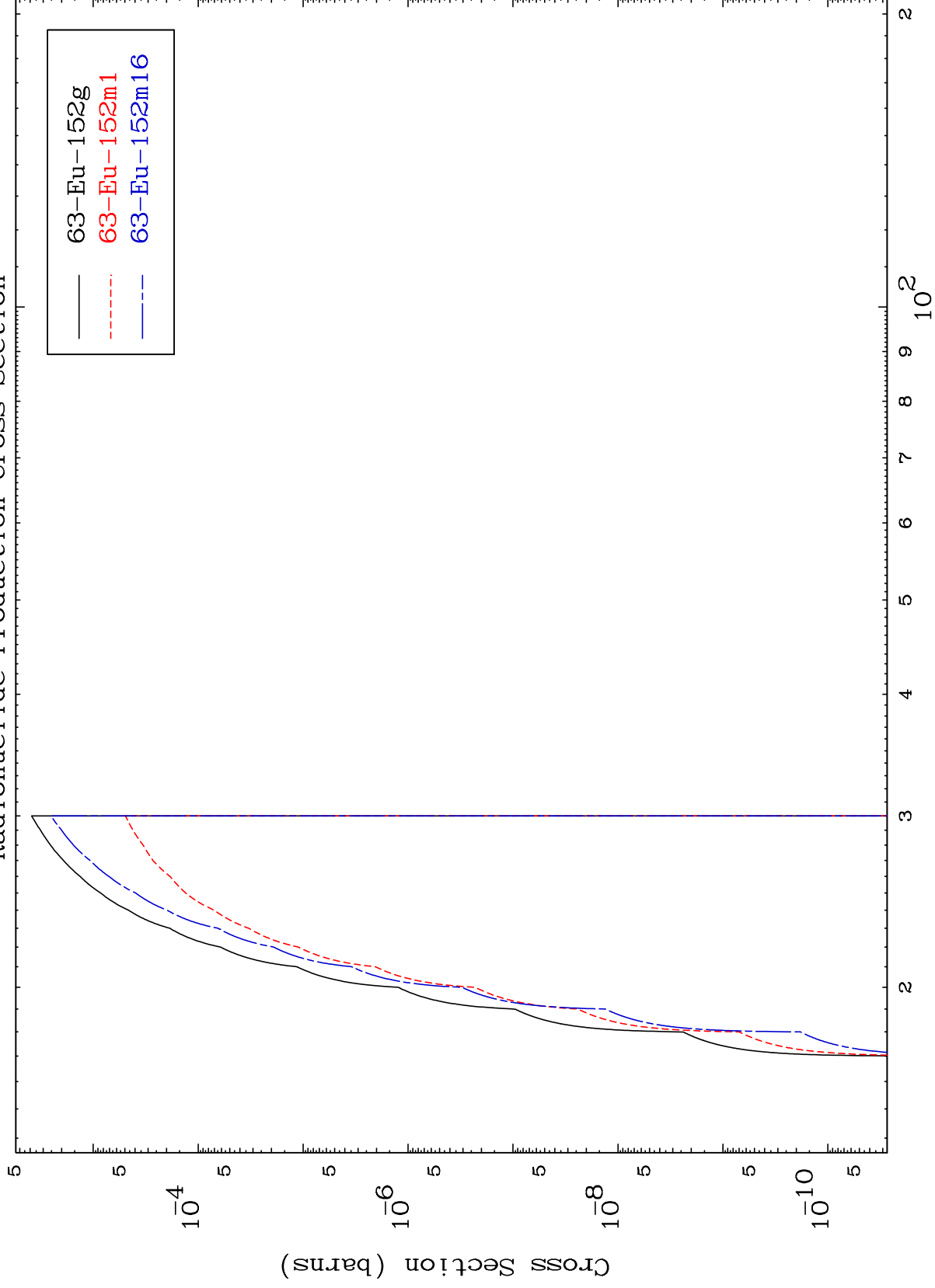
Incident Energy (MeV)

64-Gd-154





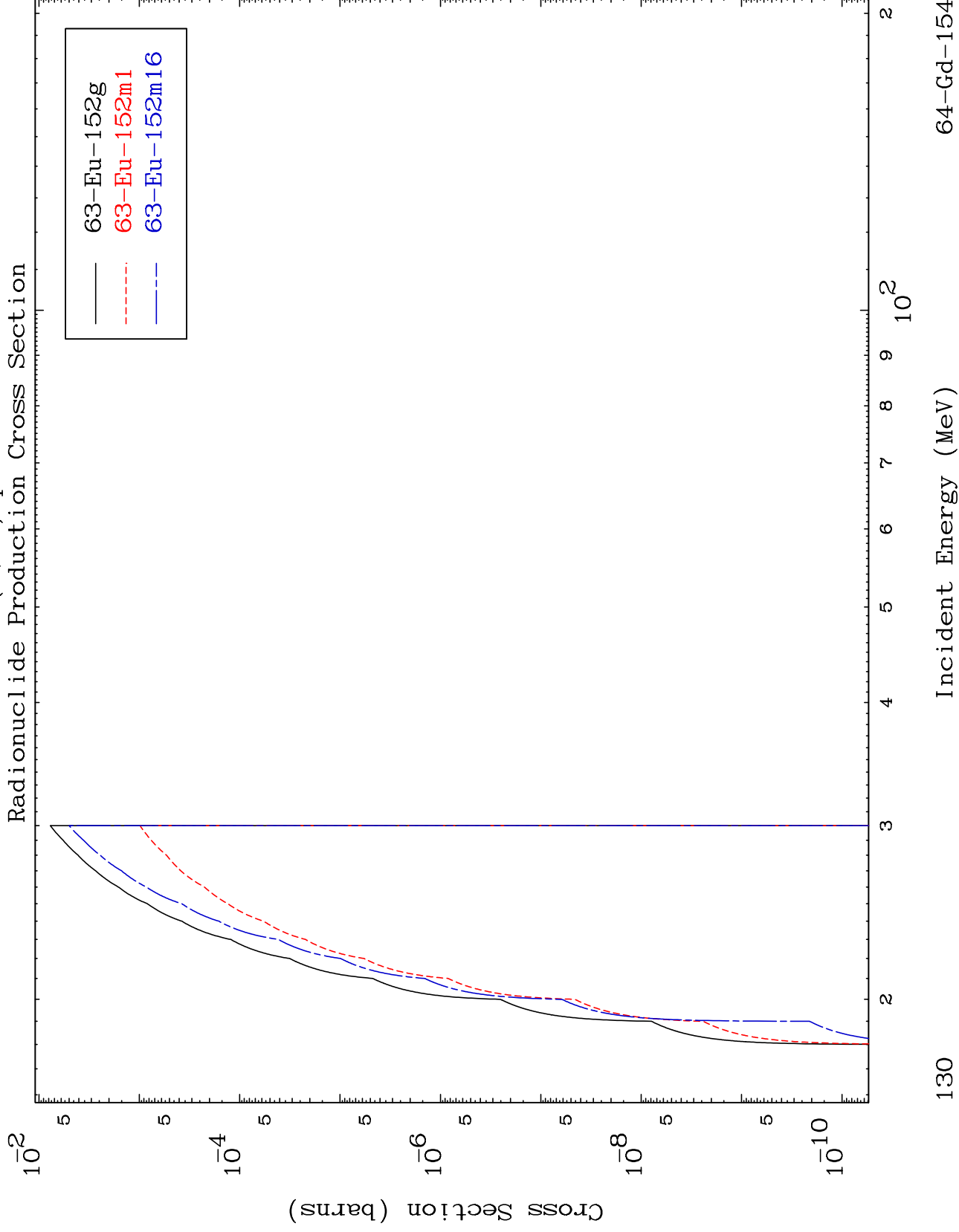
Radionuclide Production Cross Section



MAT 6431

(n,2n) p

64-Gd-154



130

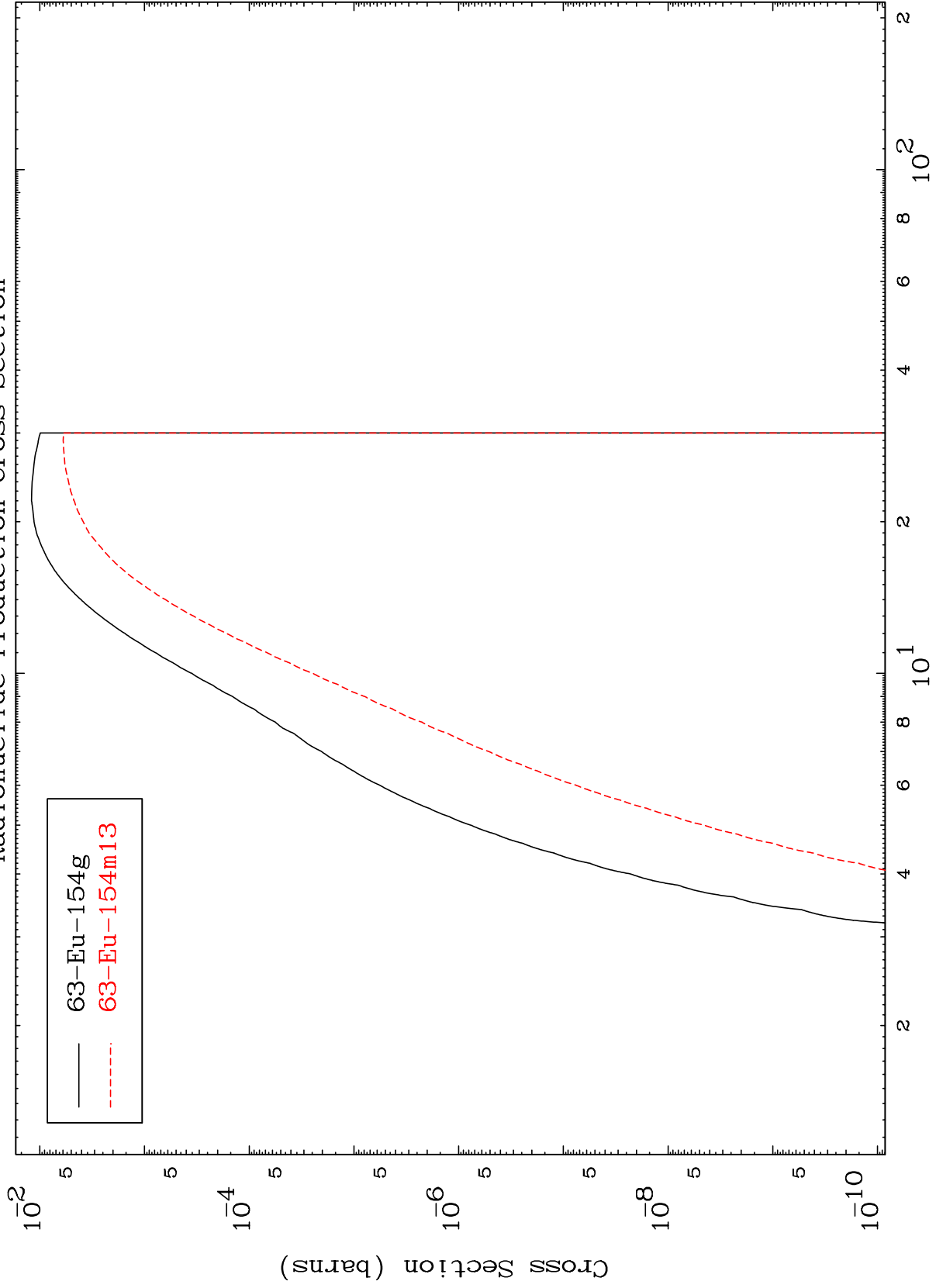
Incident Energy (MeV)

64-Gd-154

MAT 6431

64-Gd-154

(n,p)  
Radionuclide Production Cross Section



131

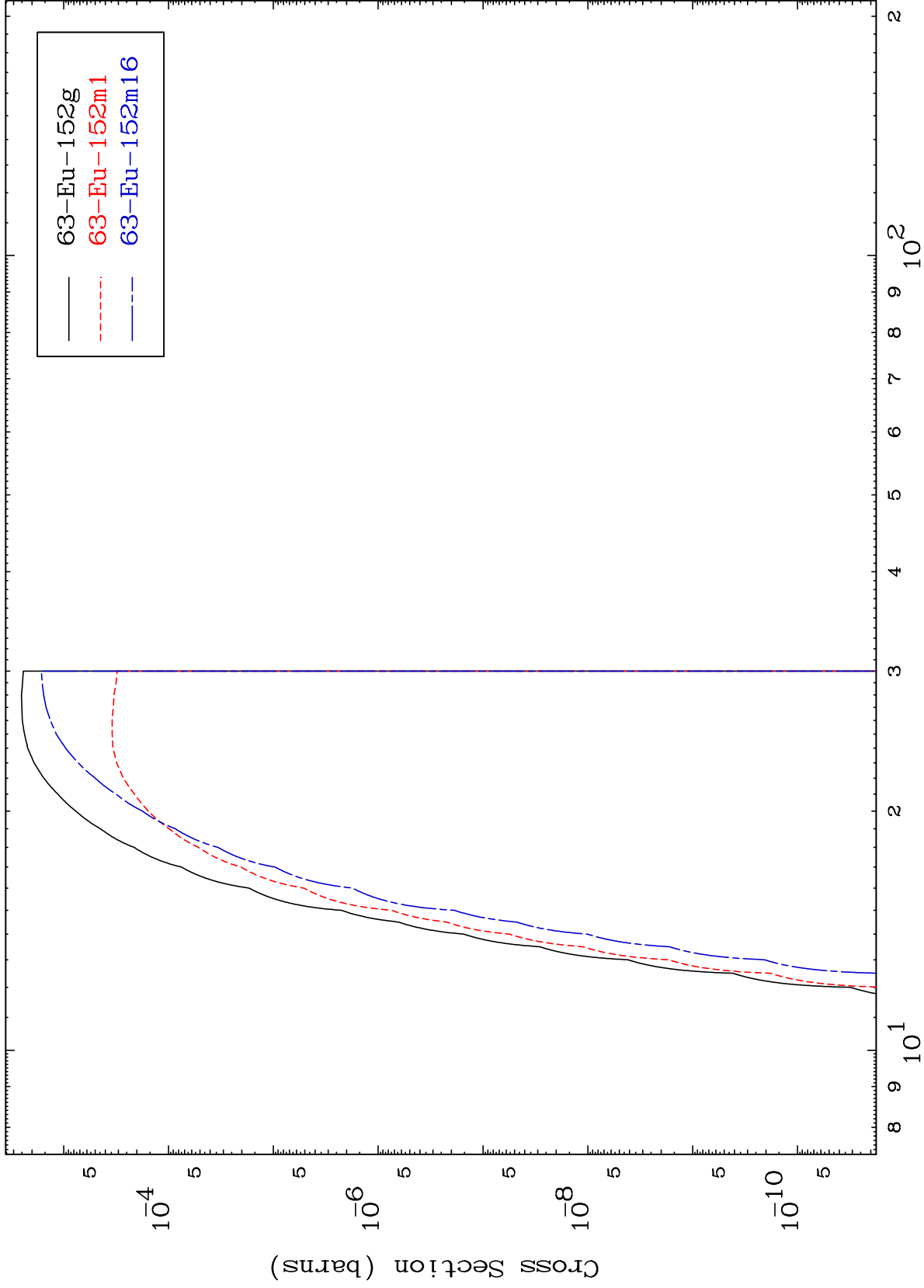
Incident Energy (MeV)

64-Gd-154

MAT 6431

64-Gd-154

(n, t)  
Radionuclide Production Cross Section



64-Gd-154

Incident Energy (MeV)

132