

Program EVALPLOT  
(Version 2021-1)

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

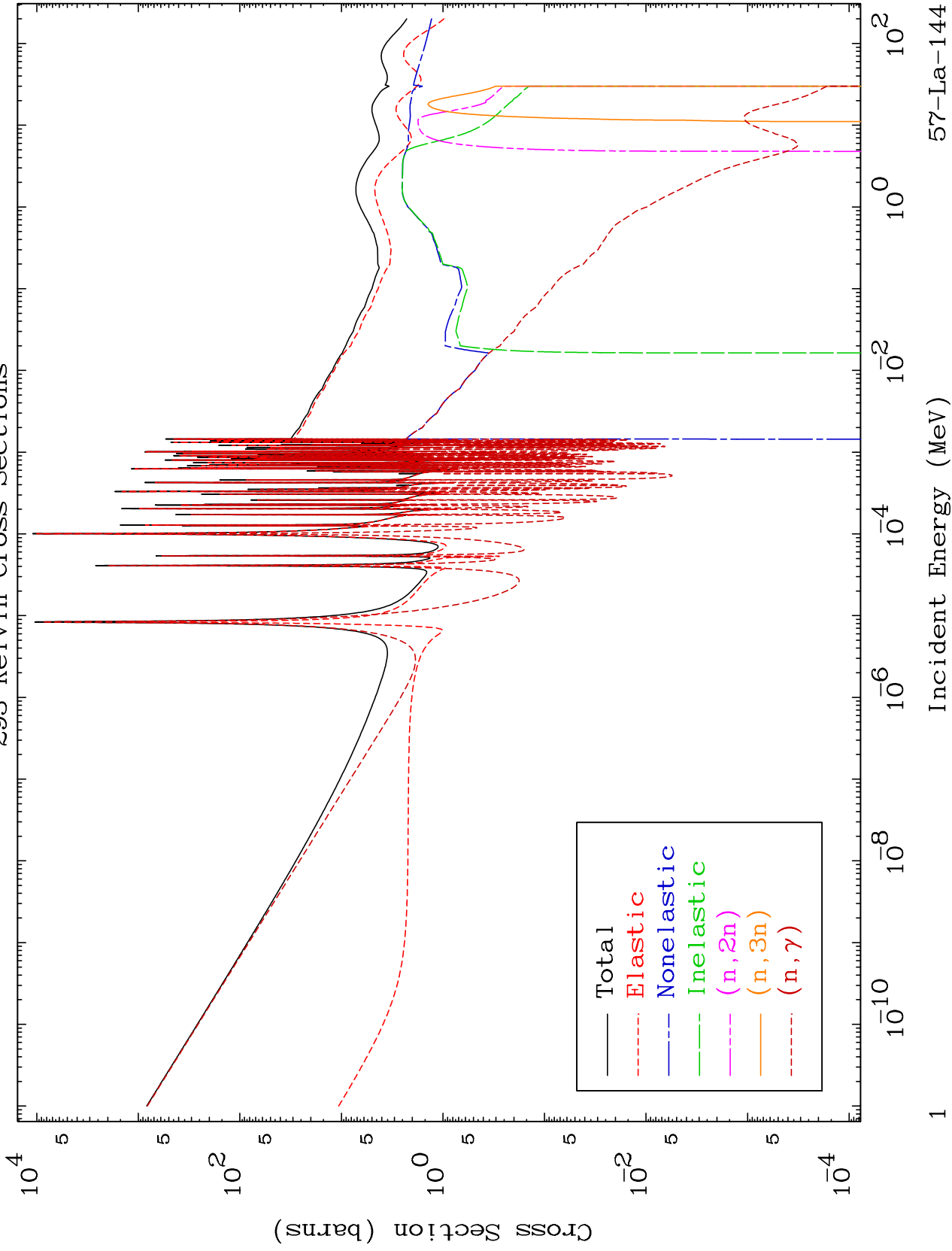
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 5743

Neutron Major  
293 Kelvin Cross Sections

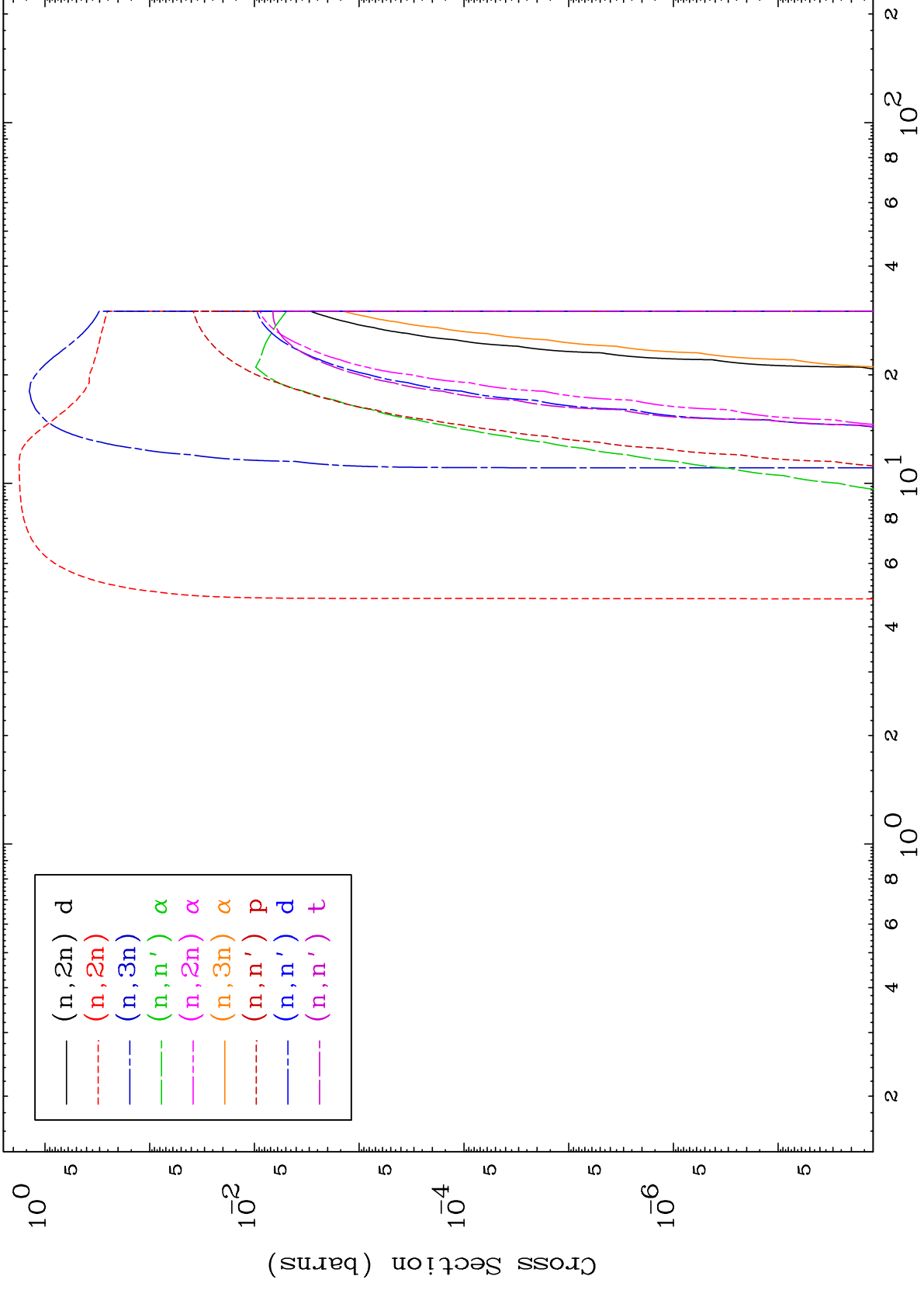
57-La-144



MAT 5743

Neutron Absorption  
293 Kelvin Cross Sections

57-La-144



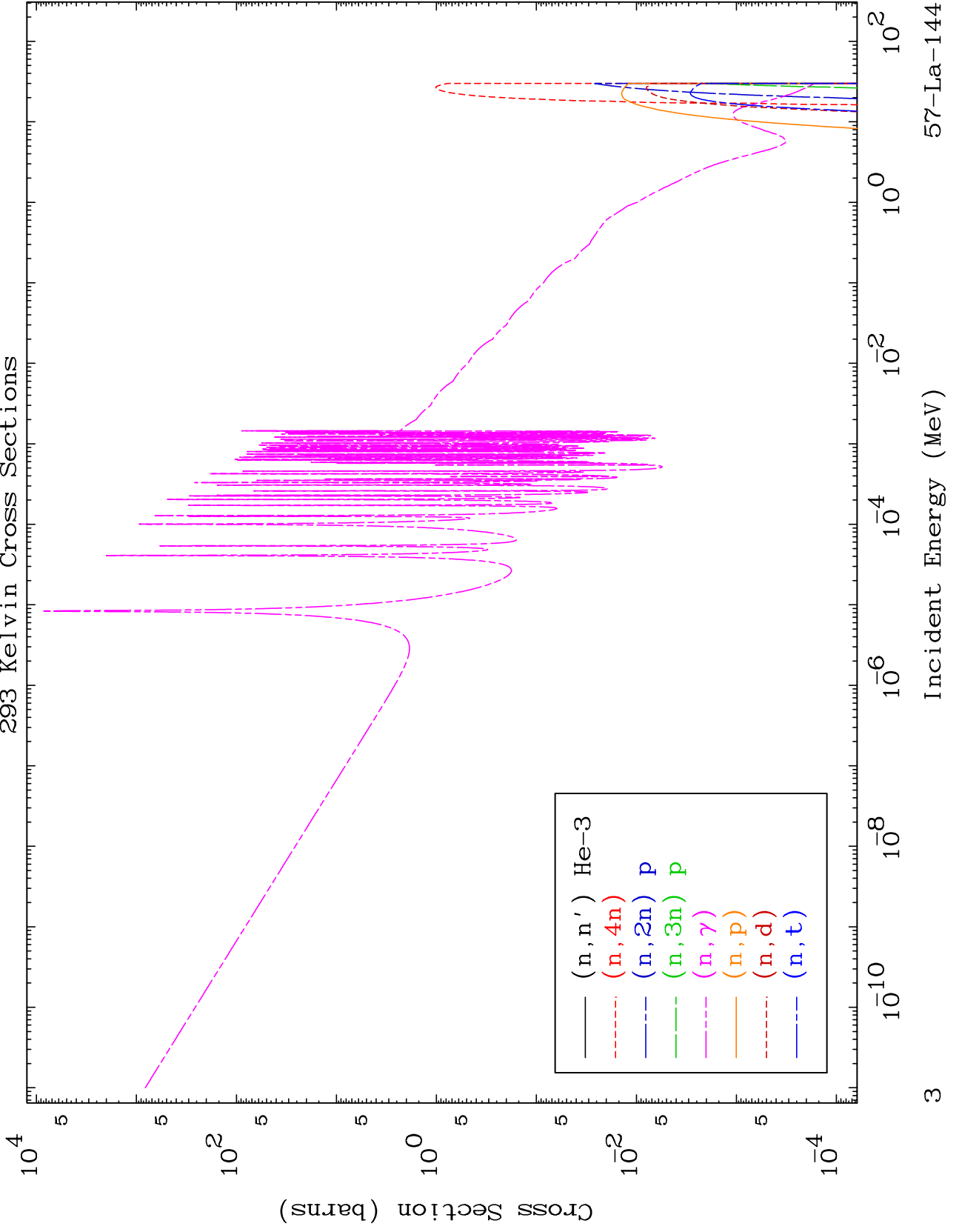
57-La-144

Incident Energy (MeV)

MAT 5743

Neutron Absorption  
293 Kelvin Cross Sections

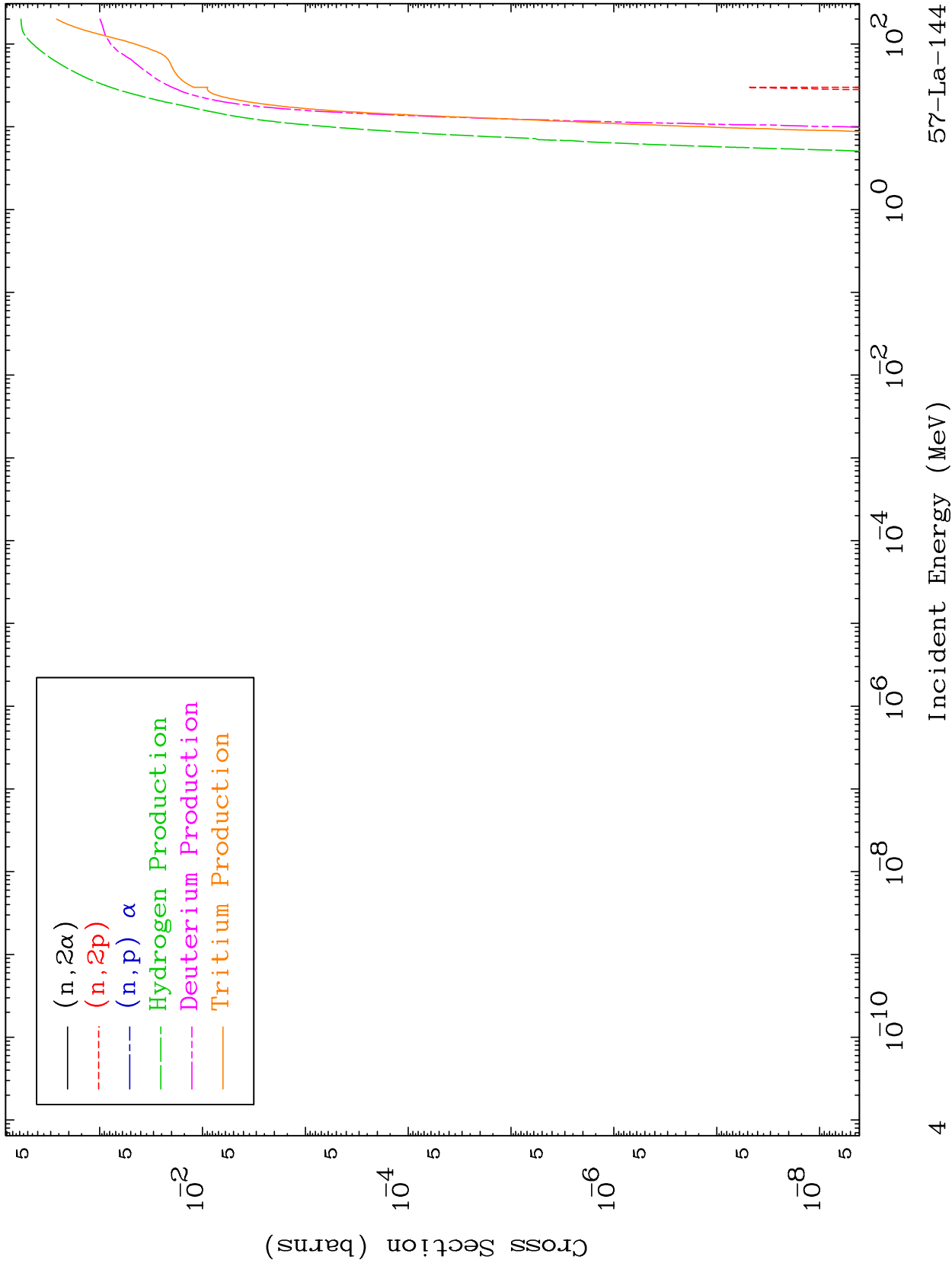
57-La-144



MAT 5743

Neutron Absorption  
293 Kelvin Cross Sections

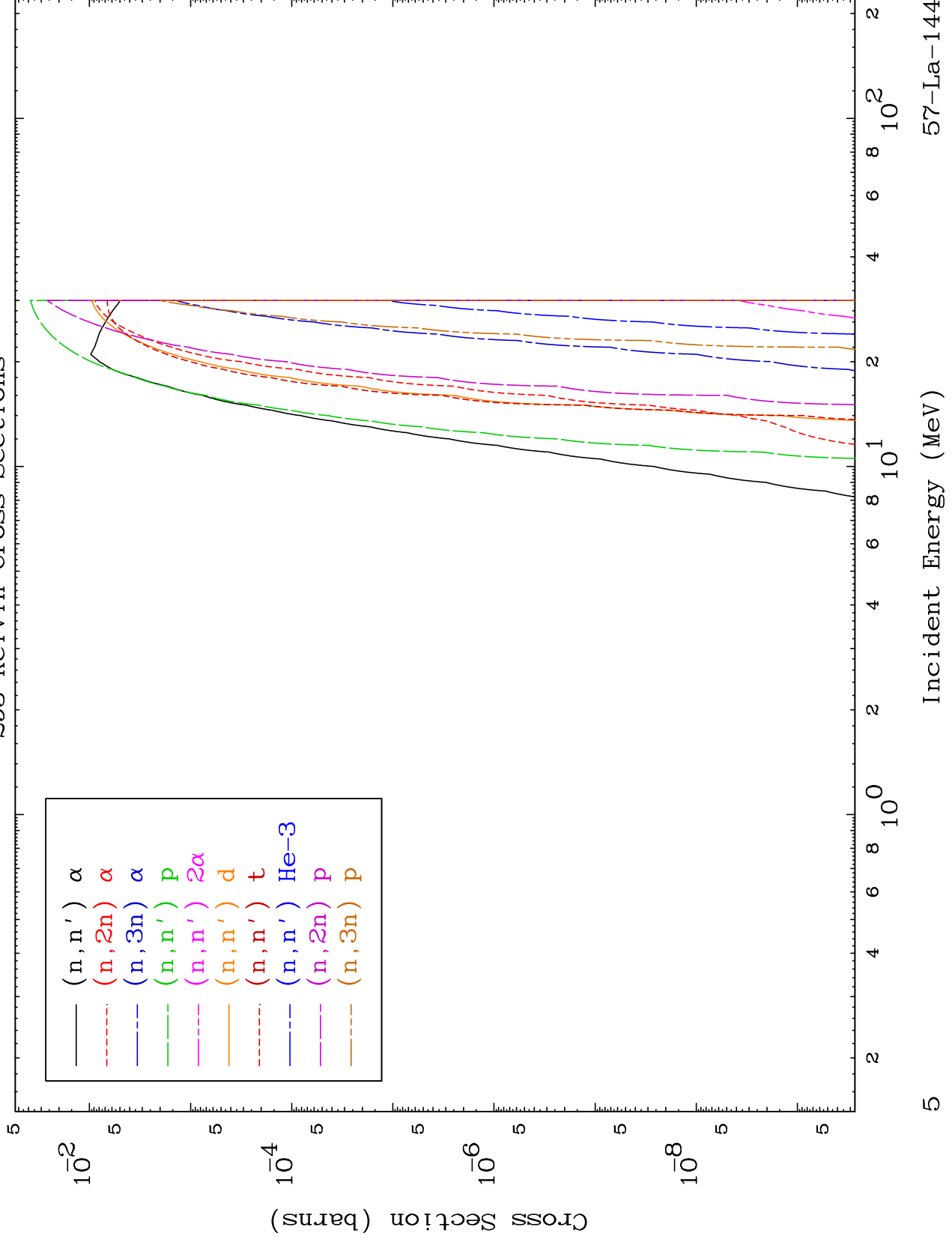
57-La-144



MAT 5743

Charged Particle  
293 Kelvin Cross Sections

57-La-144



5

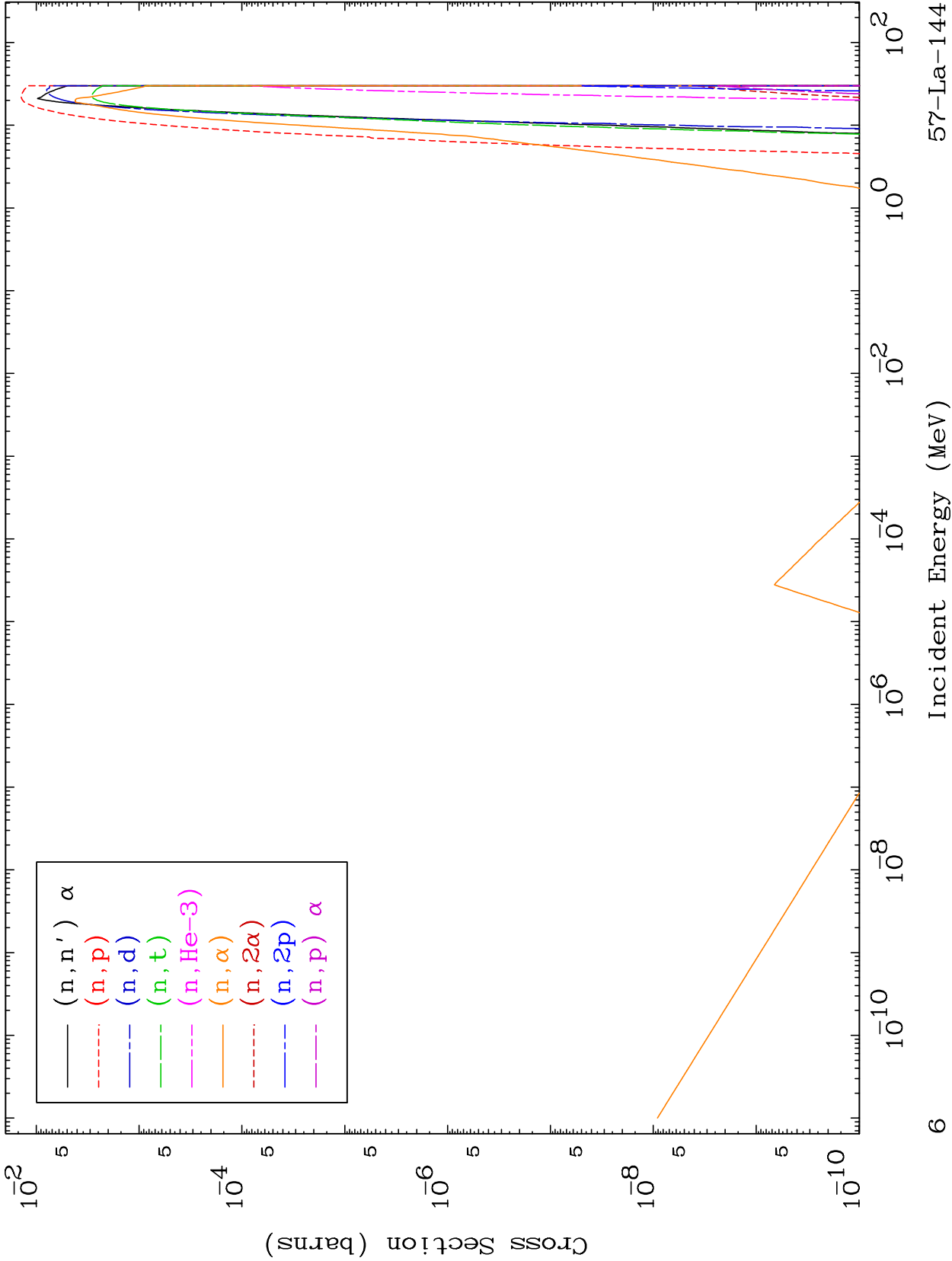
Incident Energy (MeV)

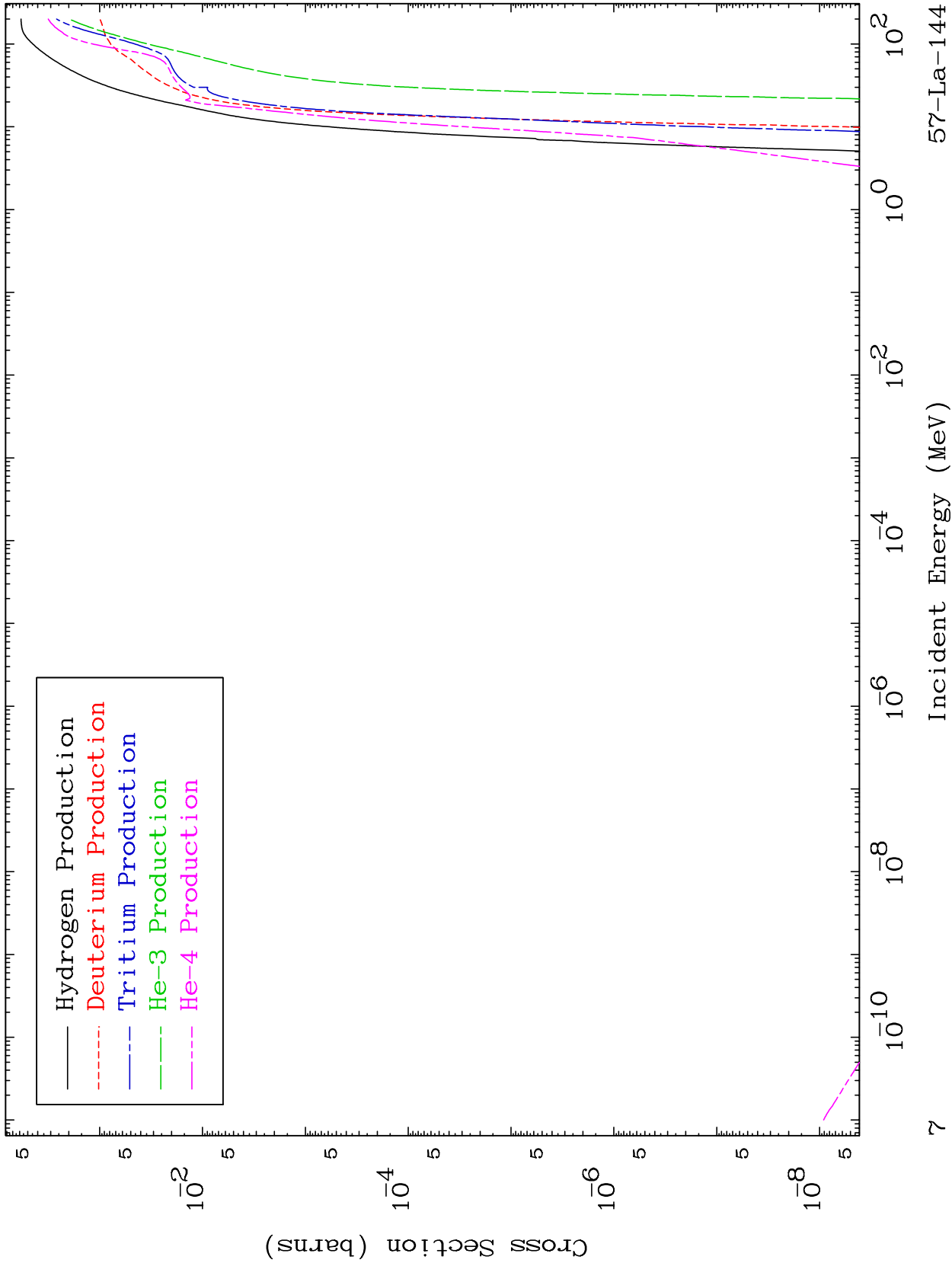
57-La-144

MAT 5743

Charged Particle  
293 Kelvin Cross Sections

57-La-144

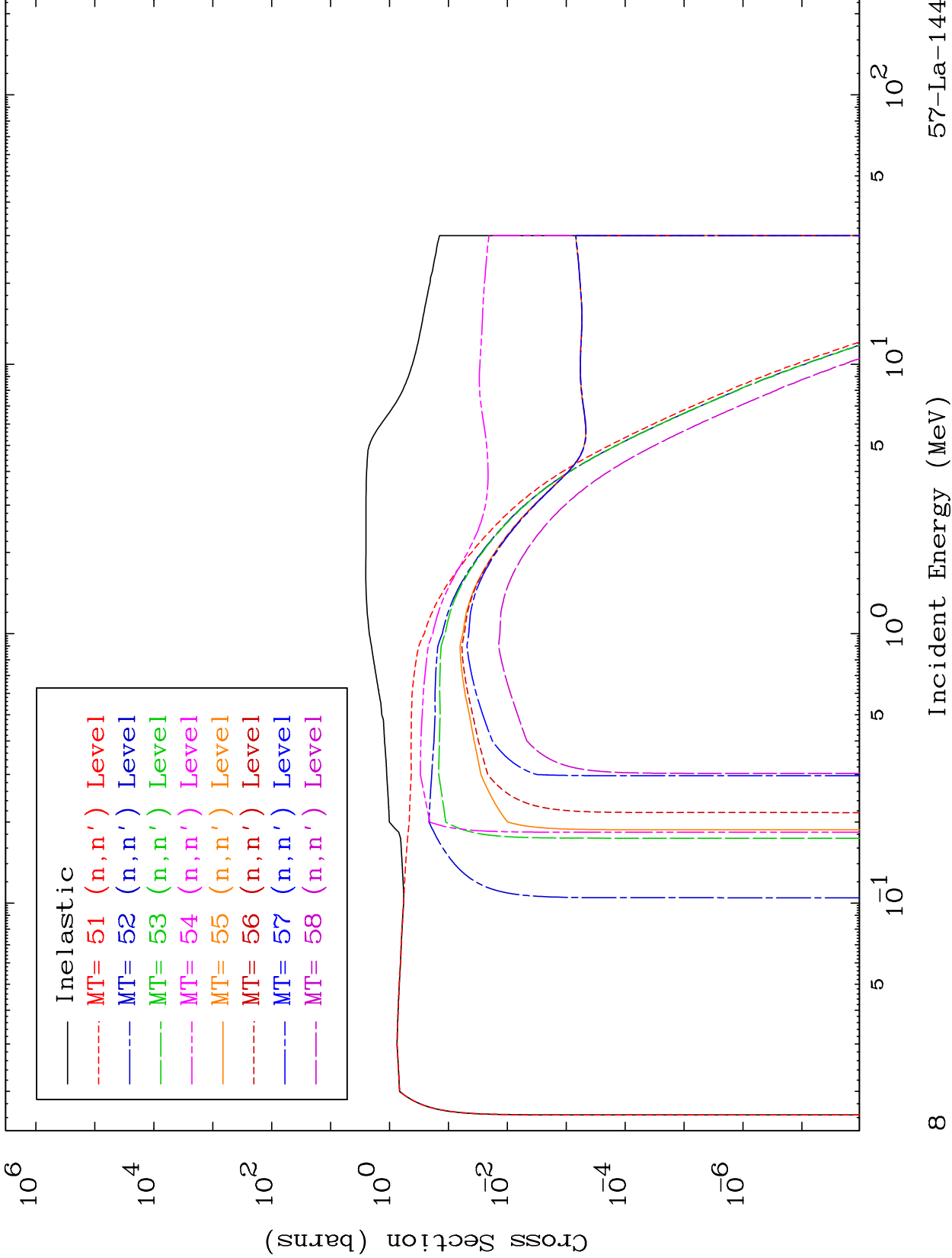


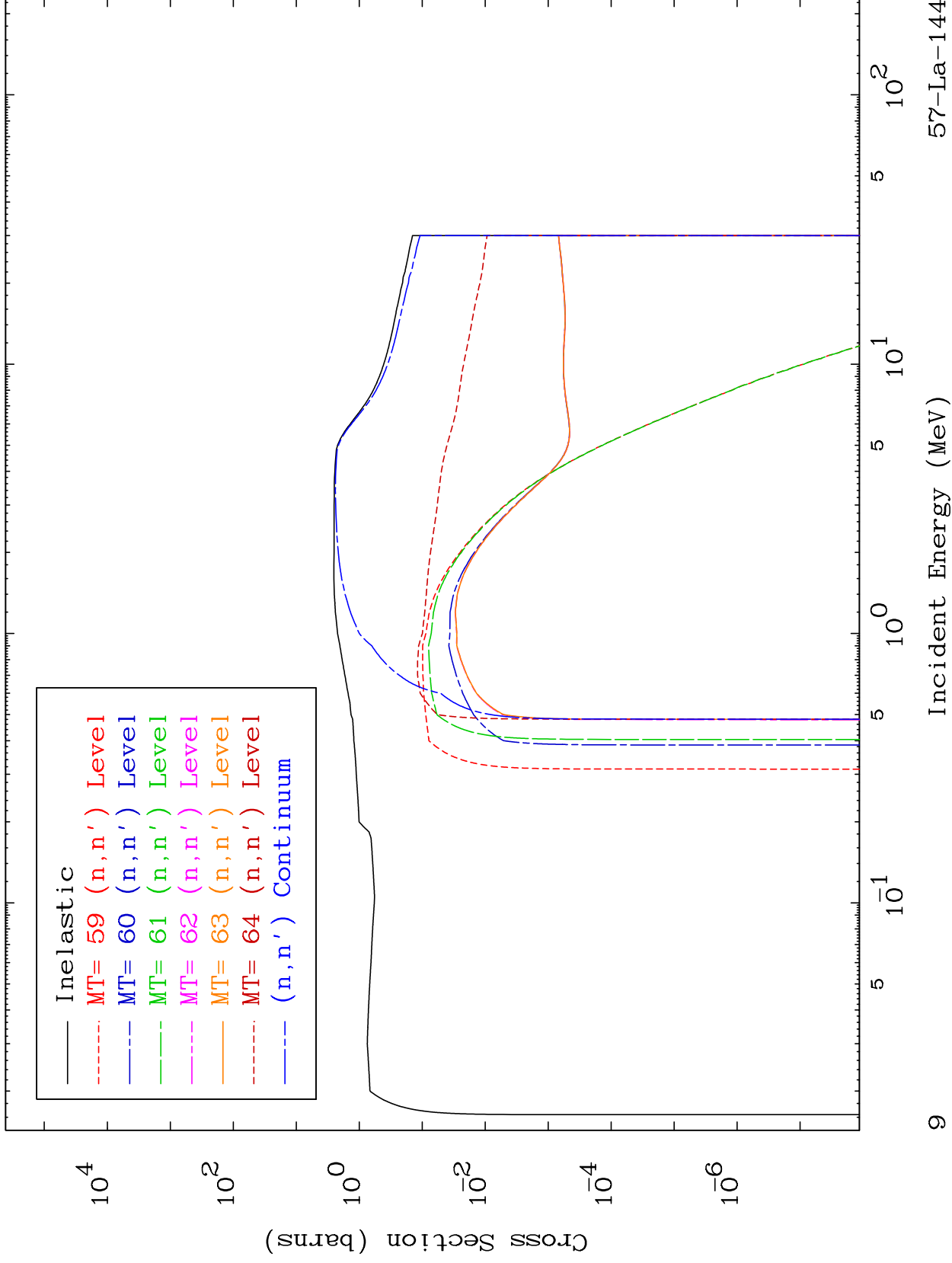


MAT 5743

(n,n') Levels  
293 Kelvin Cross Sections

57-La-144

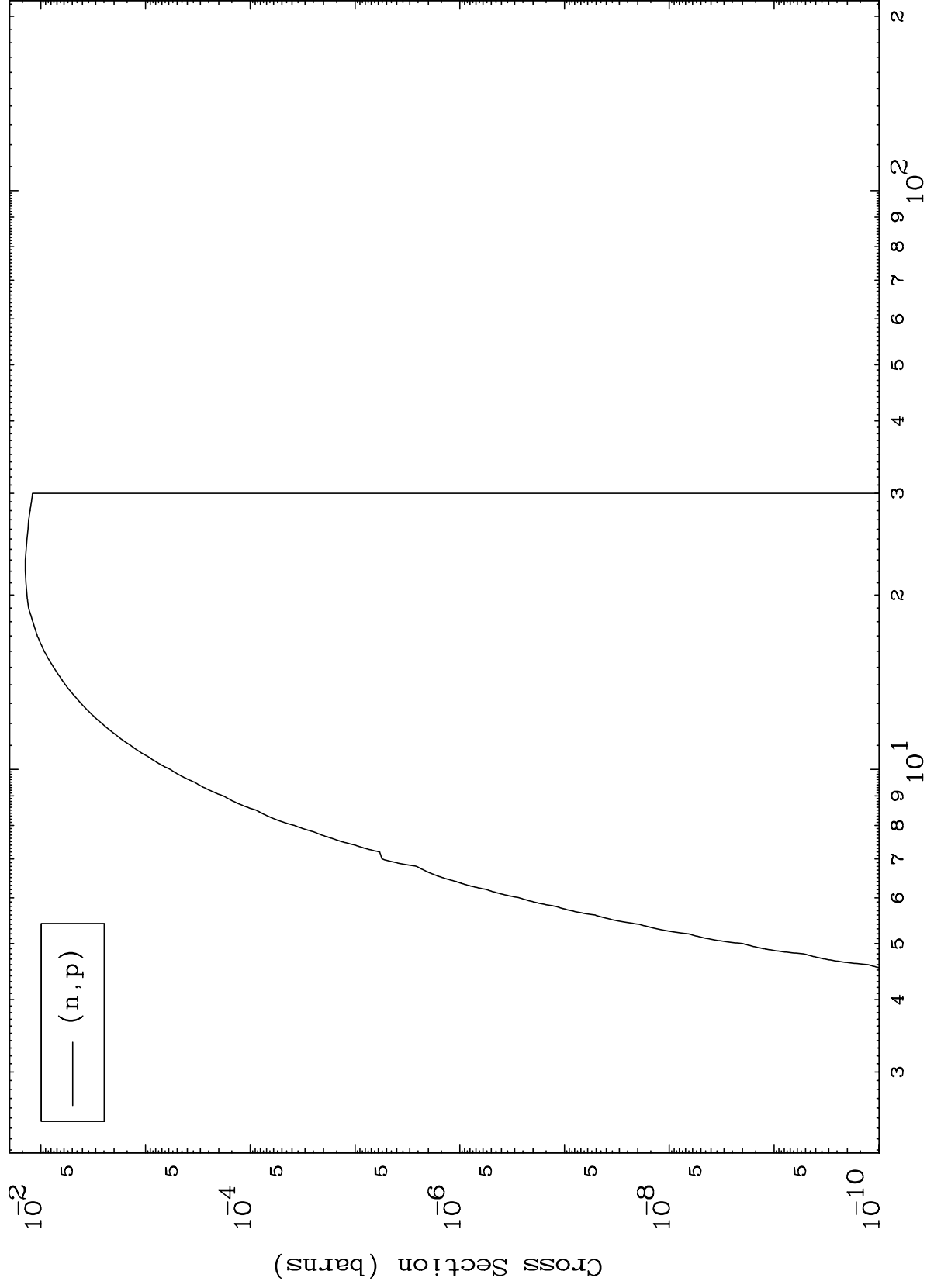




MAT 5743

(n,p) Levels  
293 Kelvin Cross Sections

57-La-144



10

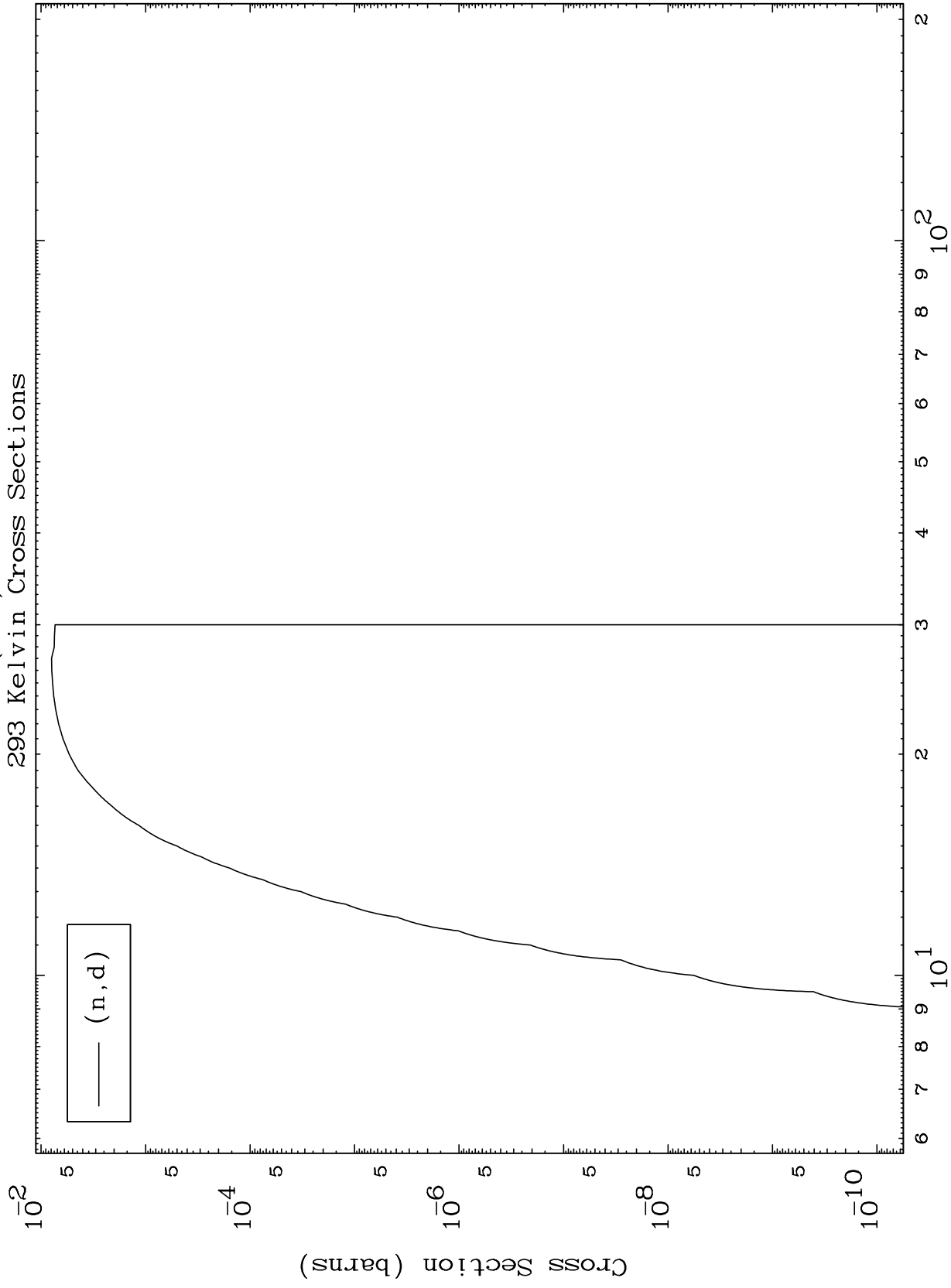
Incident Energy (MeV)

57-La-144

MAT 5743

(n,d) Levels  
293 Kelvin Cross Sections

57-La-144



11

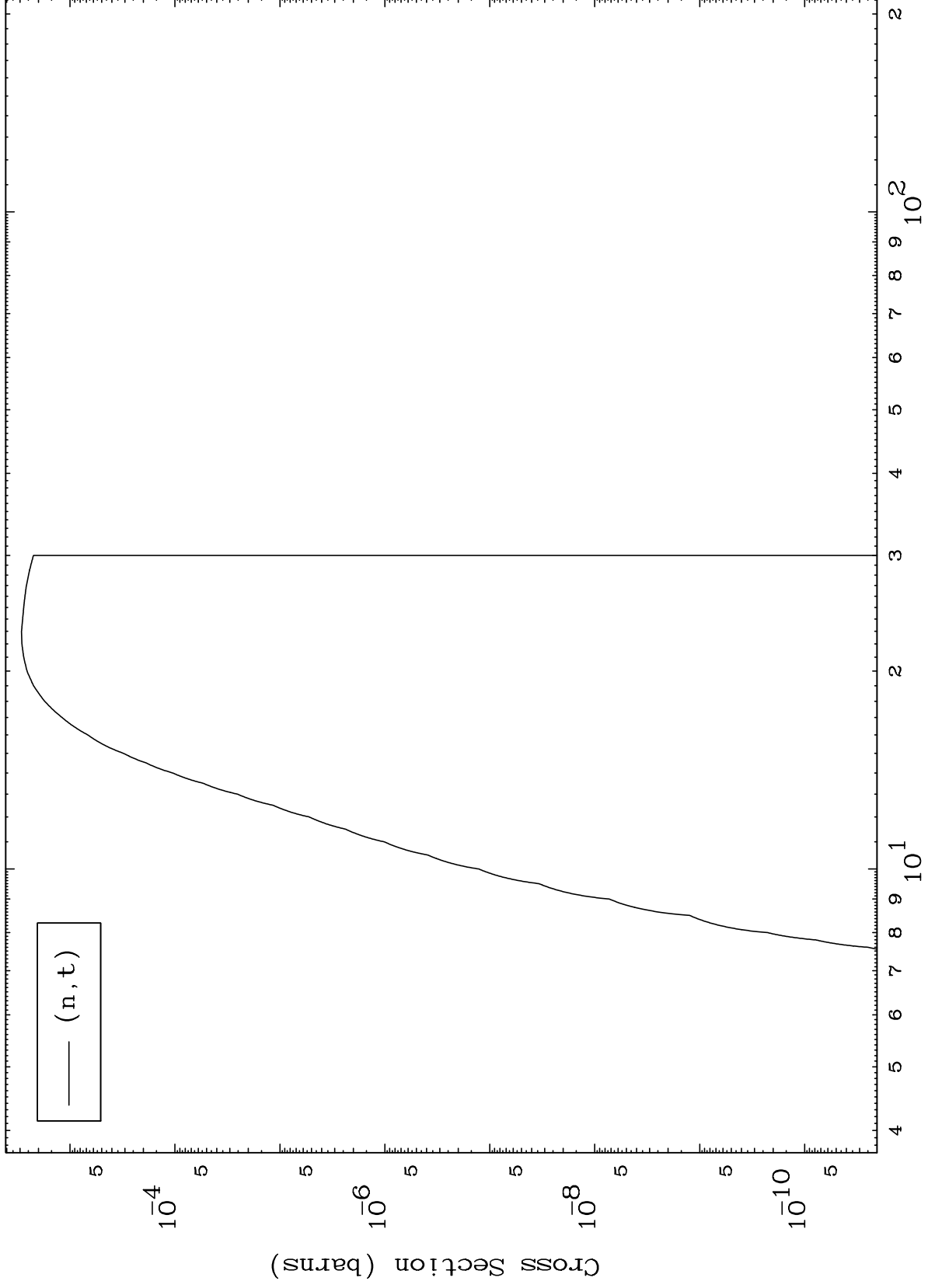
Incident Energy (MeV)

57-La-144

MAT 5743

(n,t) Levels  
293 Kelvin Cross Sections

57-La-144



12

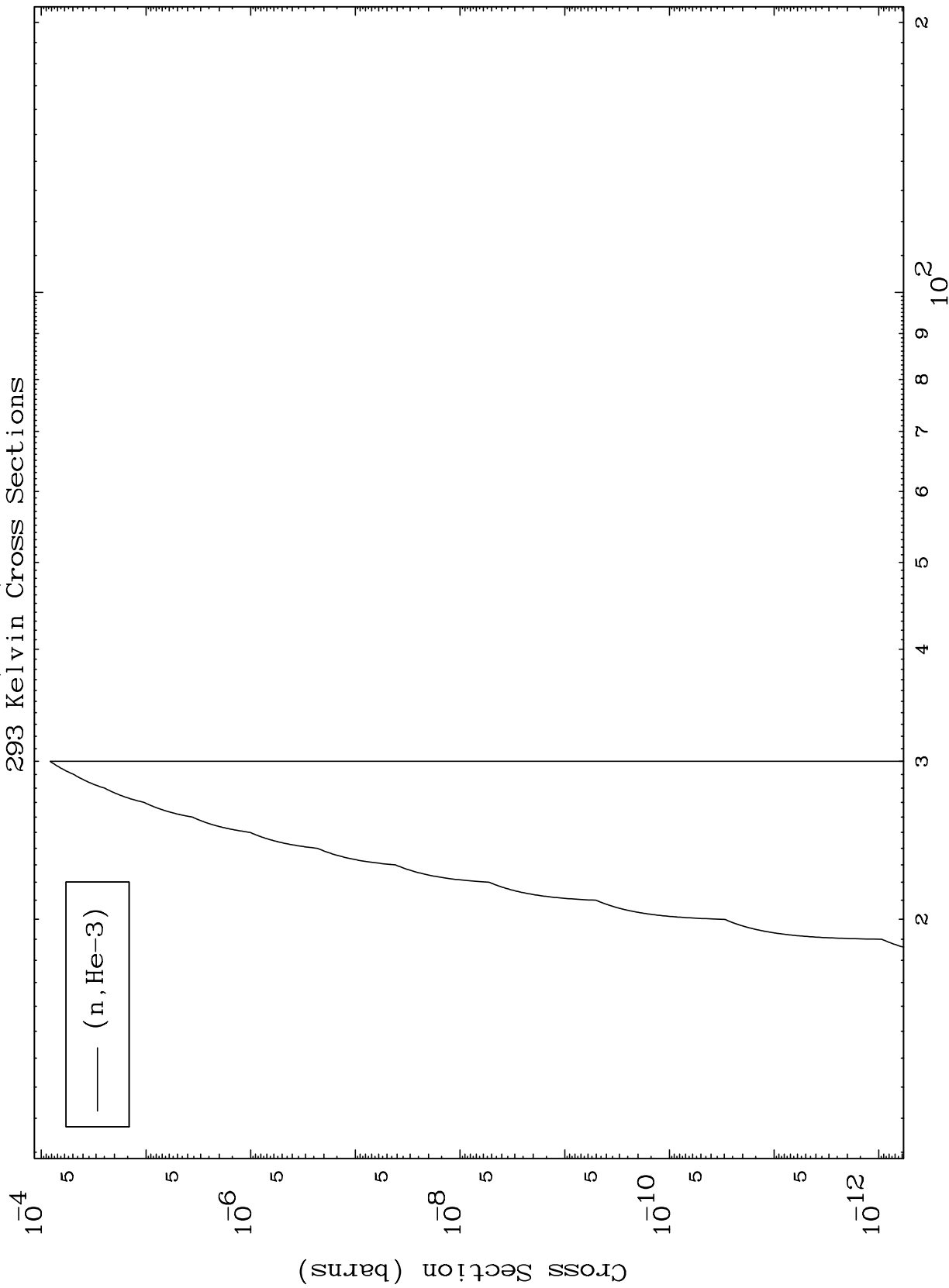
Incident Energy (MeV)

57-La-144

MAT 5743

(n,He3) Levels  
293 Kelvin Cross Sections

57-La-144



13

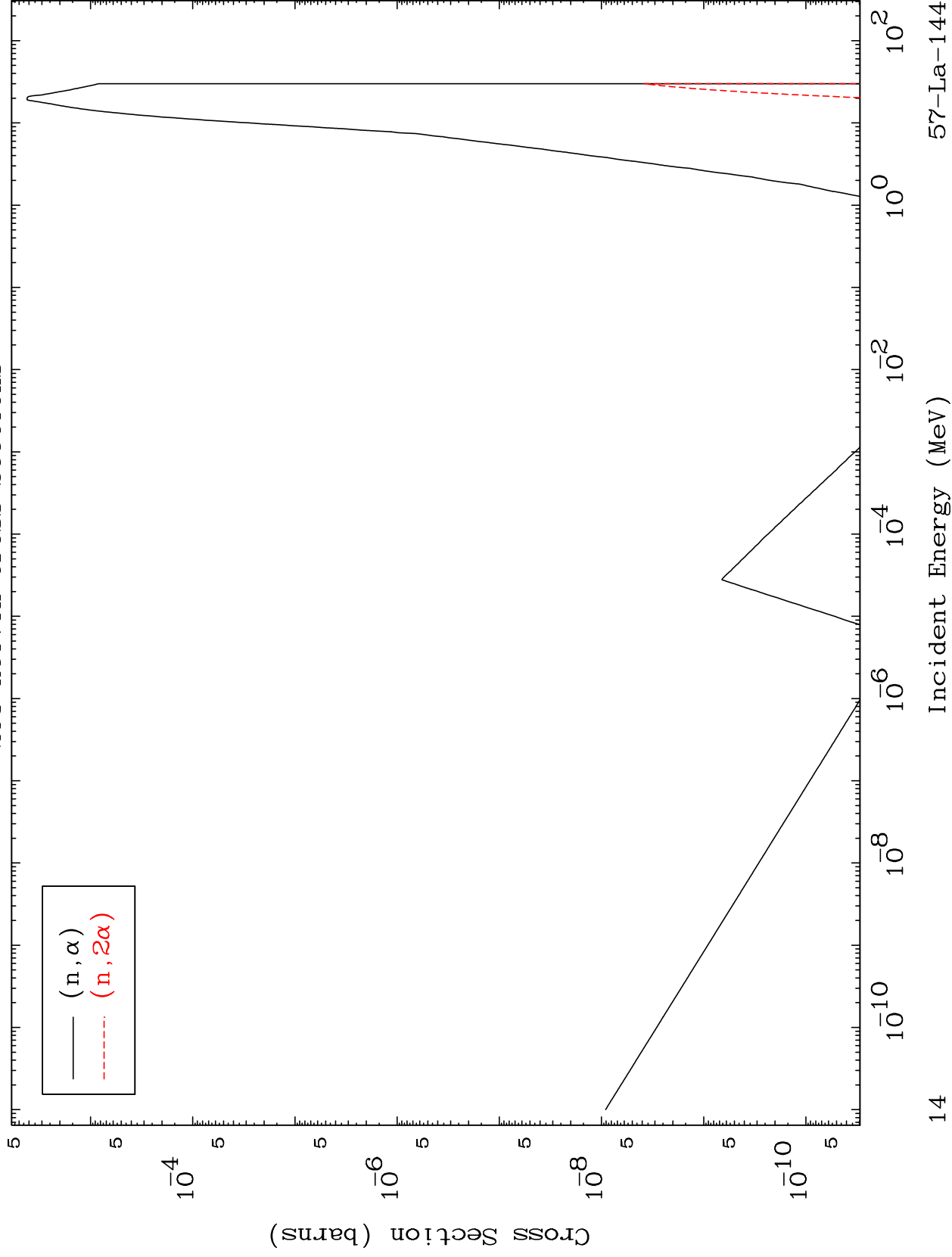
Incident Energy (MeV)

57-La-144

MAT 5743

(n,  $\alpha$ ) Levels  
293 Kelvin Cross Sections

57-La-144

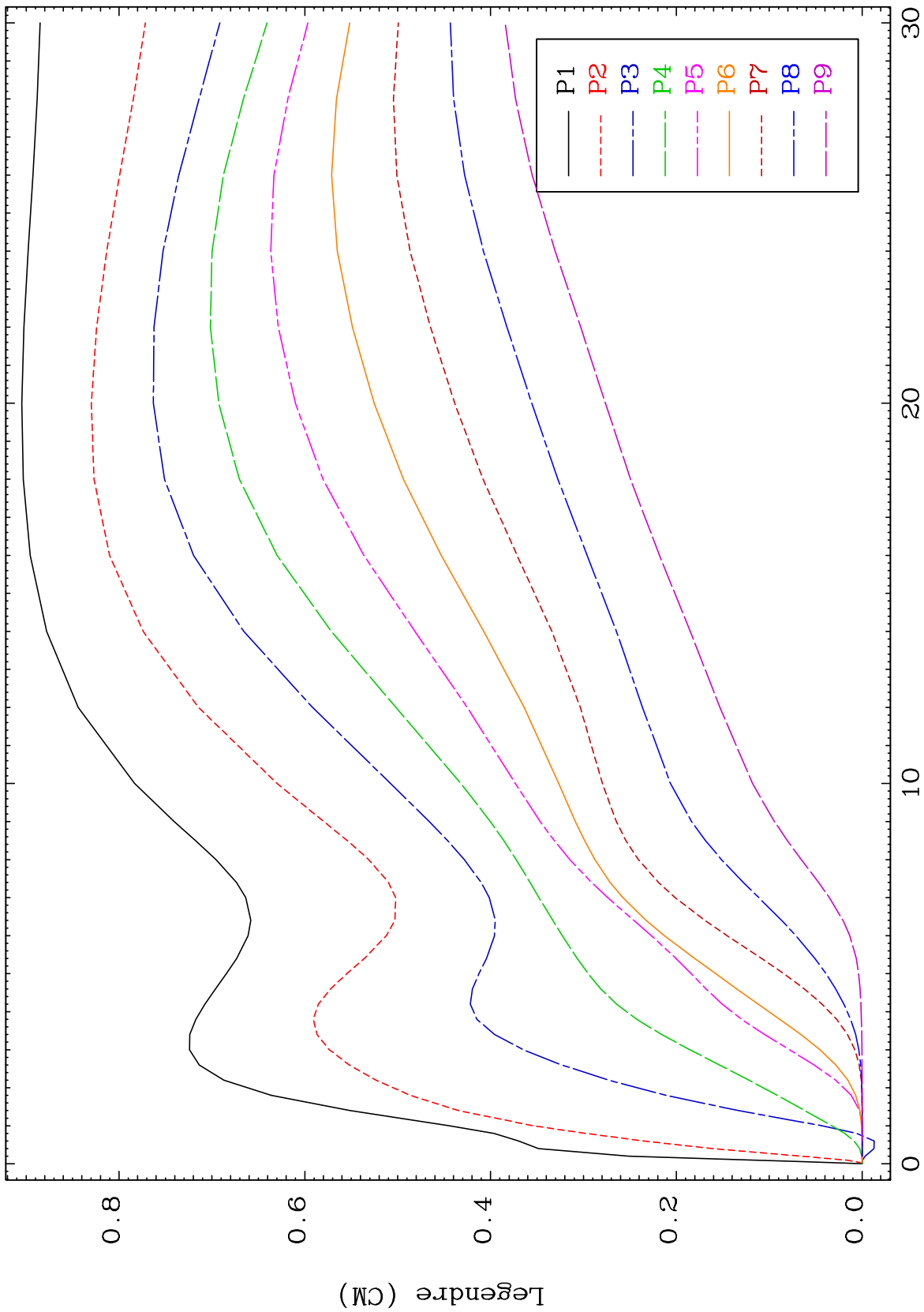


14

MAT 5743

57-La-144

Elastic Legendre Coefficients



57-La-144

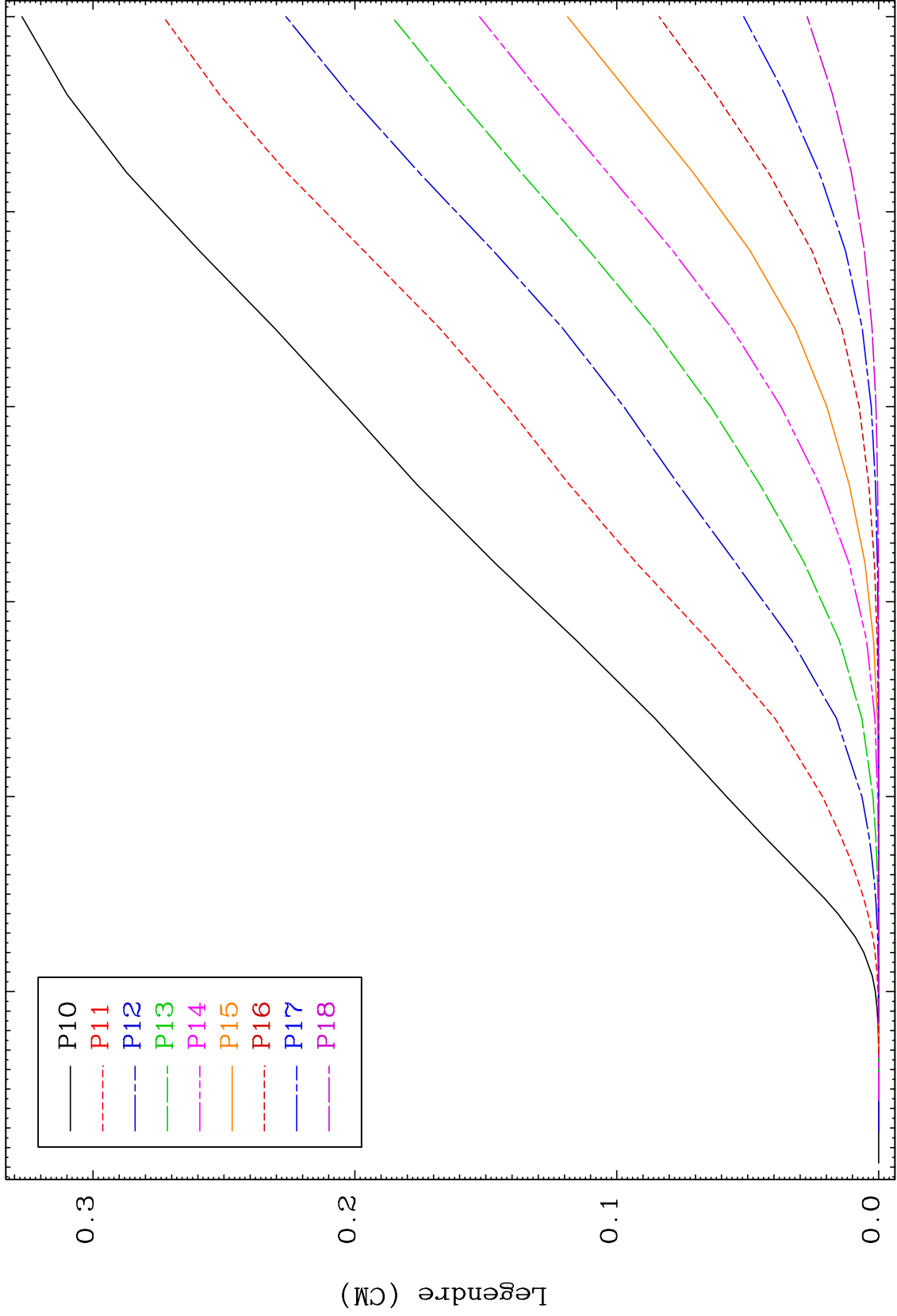
Incident Energy (MeV)

15

MAT 5743

Elastic Legendre Coefficients

57-La-144



16

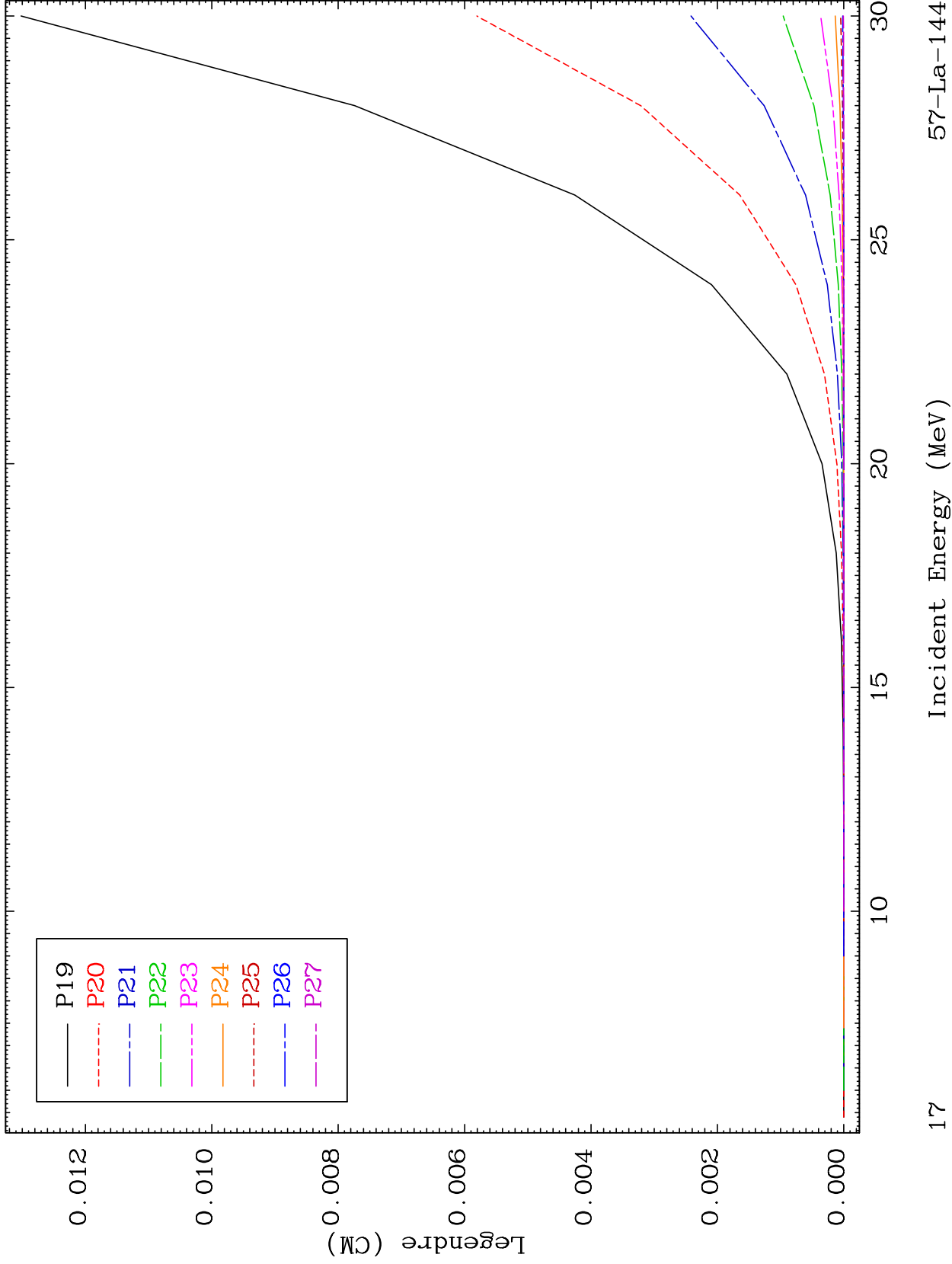
Incident Energy (MeV)

57-La-144

MAT 5743

### Elastic Legendre Coefficients

57-La-144



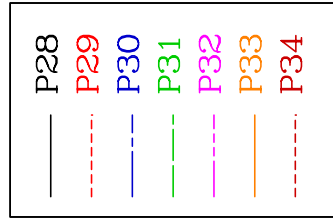
17

57-La-144

MAT 5743

Elastic  
Legendre Coefficients

57-La-144



$\times 10^{-6}$

Legendre (CM)

1.0

0.5

0.0

10

15

20

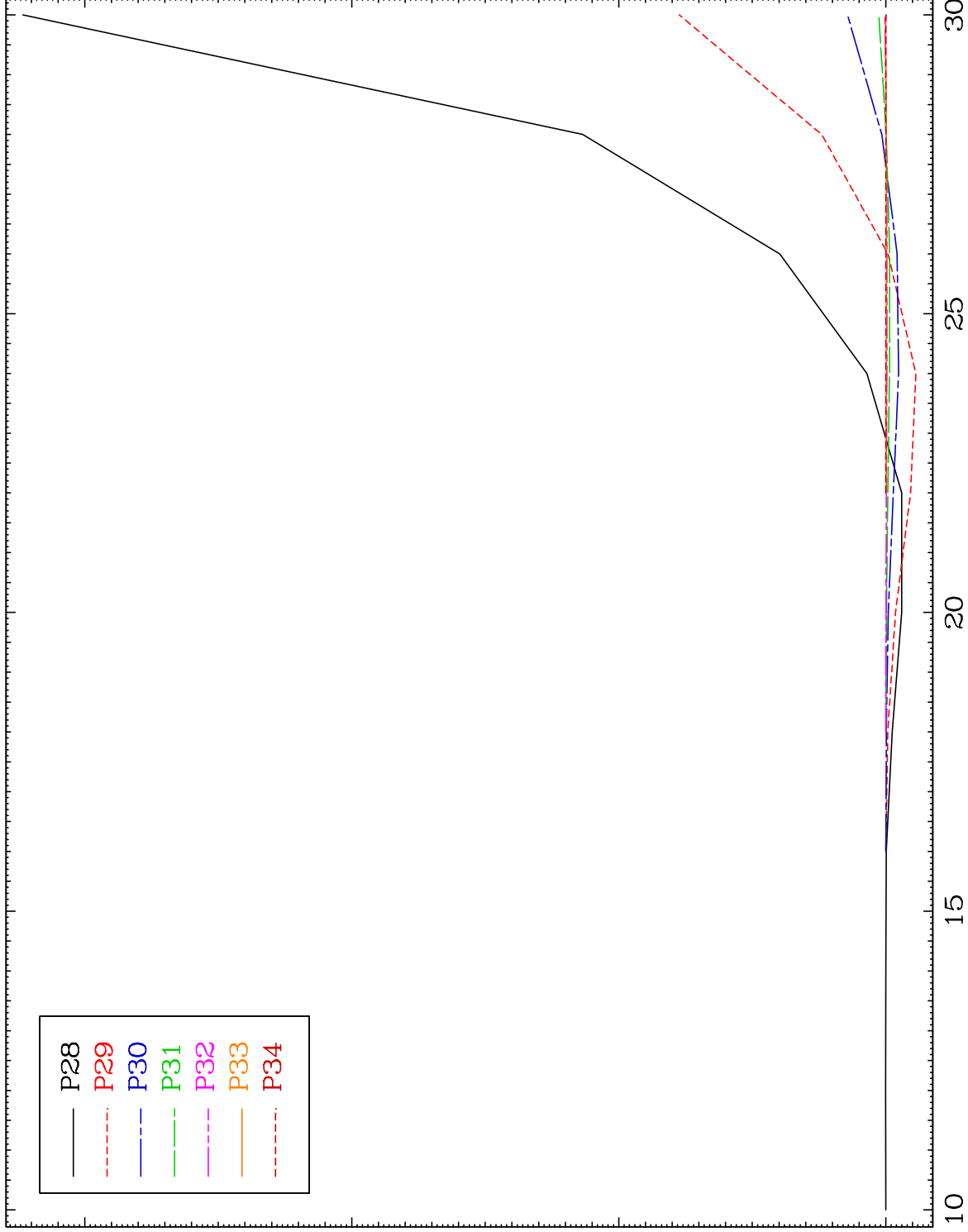
25

30

18

Incident Energy (MeV)

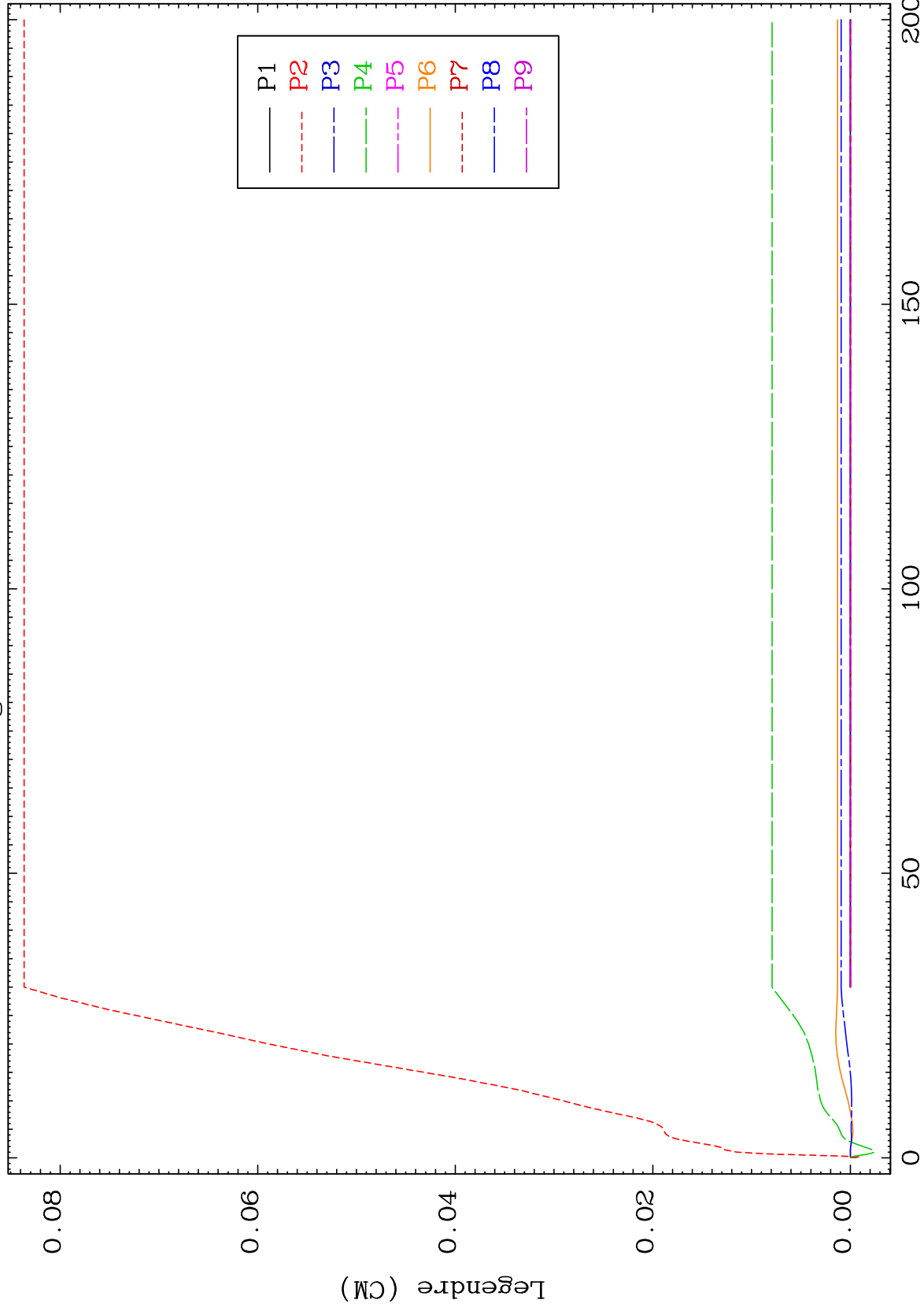
57-La-144



MAT 5743

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

57-La-144



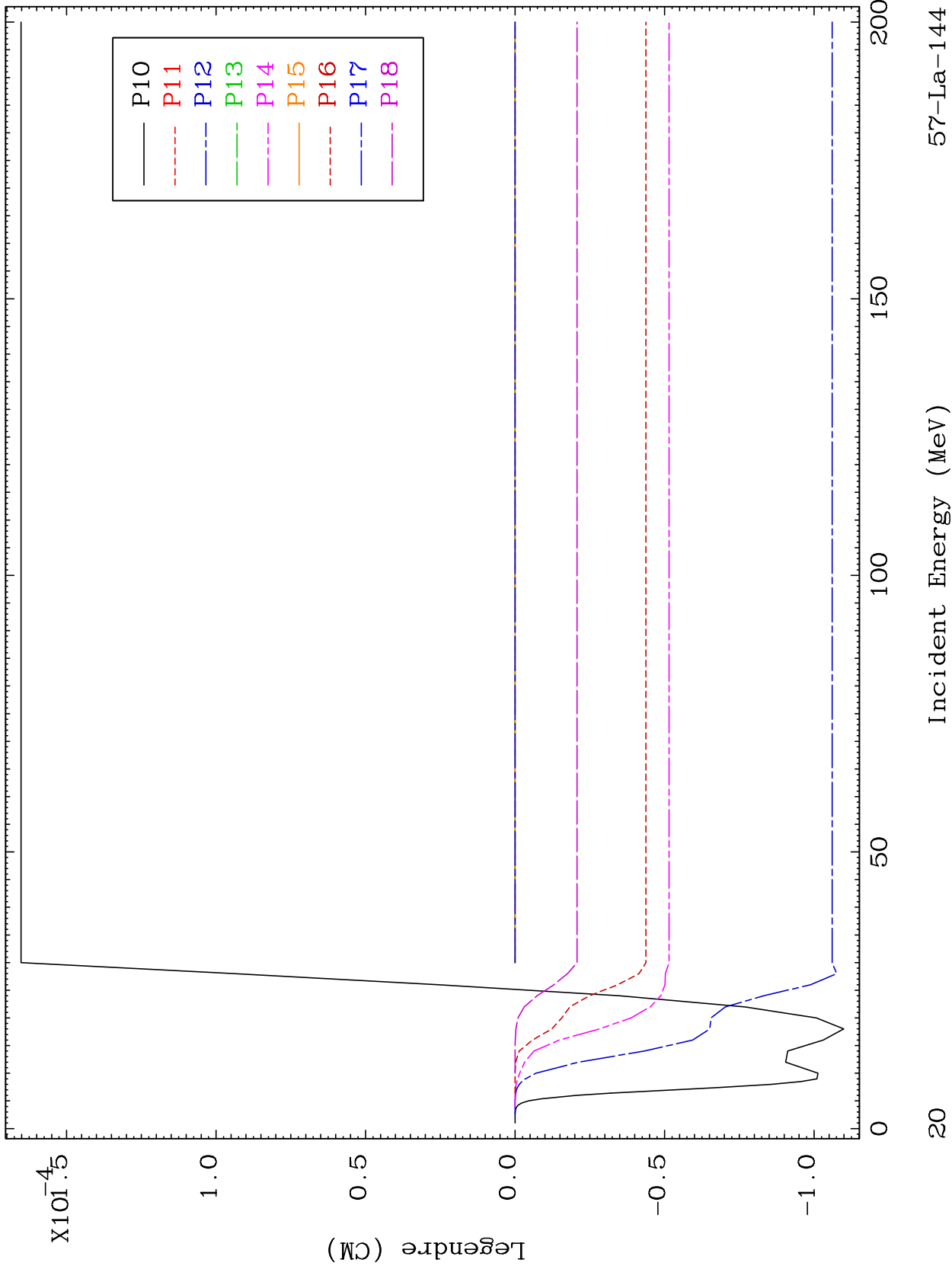
19

57-La-144

MAT 5743

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

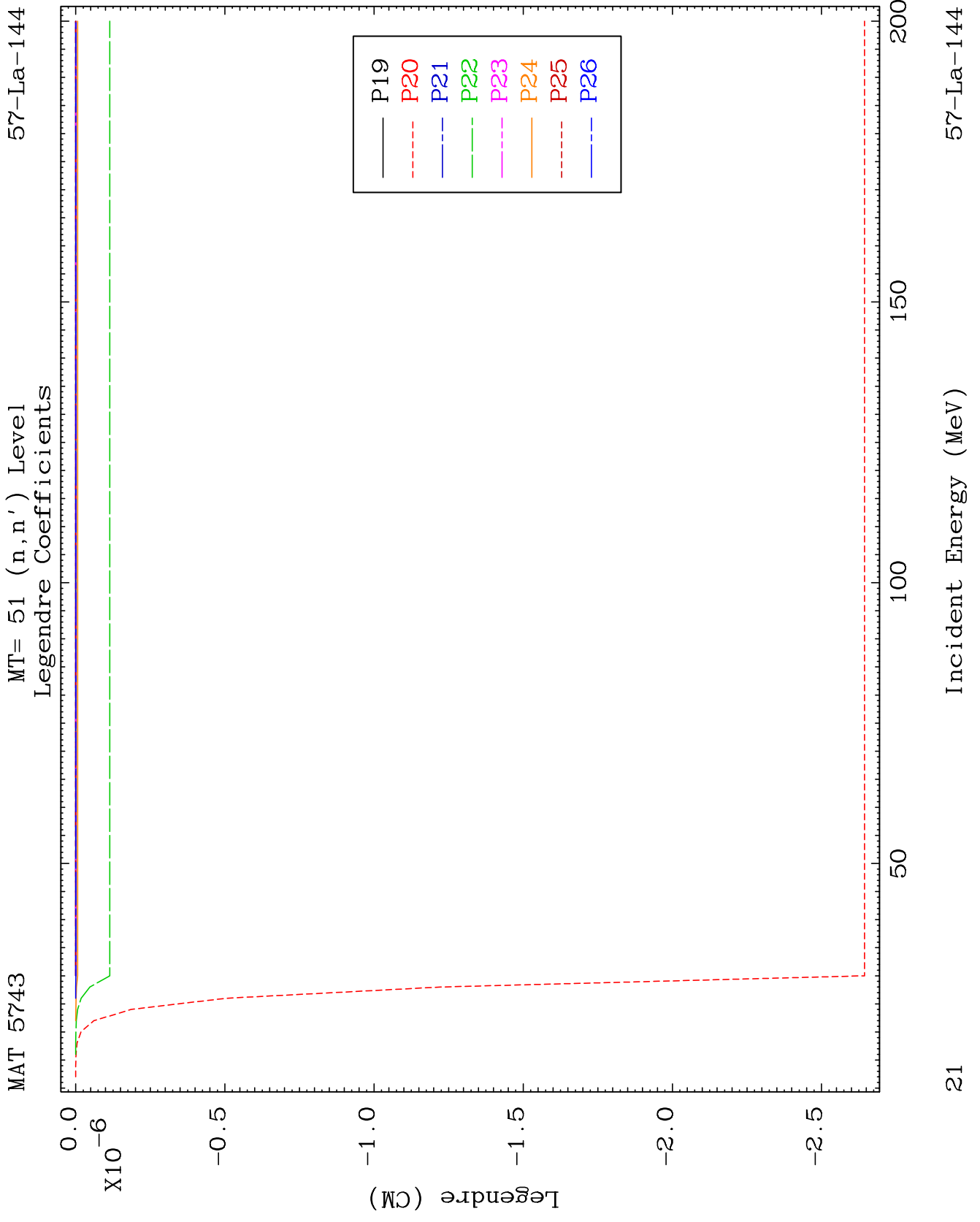
57-La-144



57-La-144

Incident Energy (MeV)

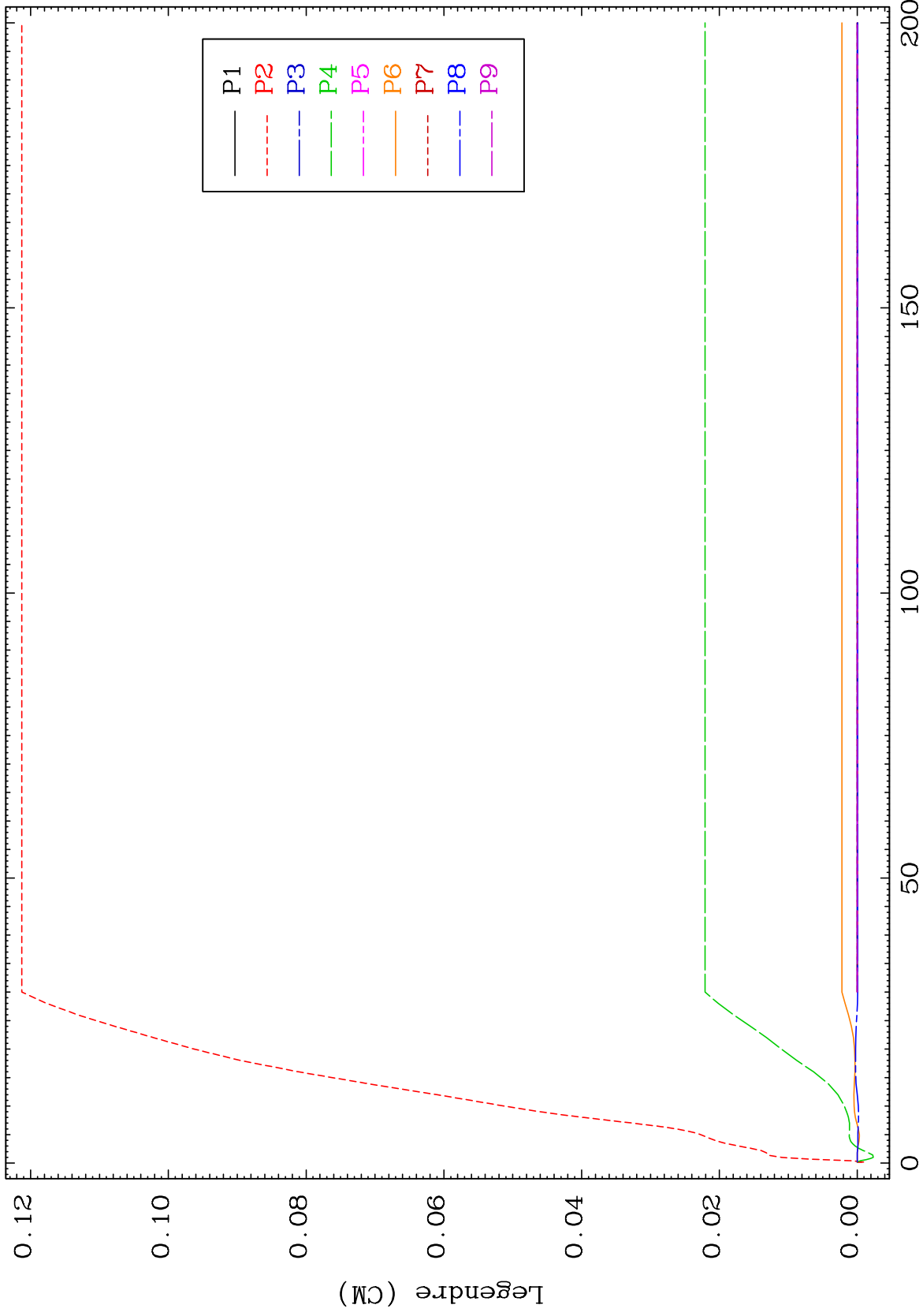
20



MAT 5743

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

57-La-144



22

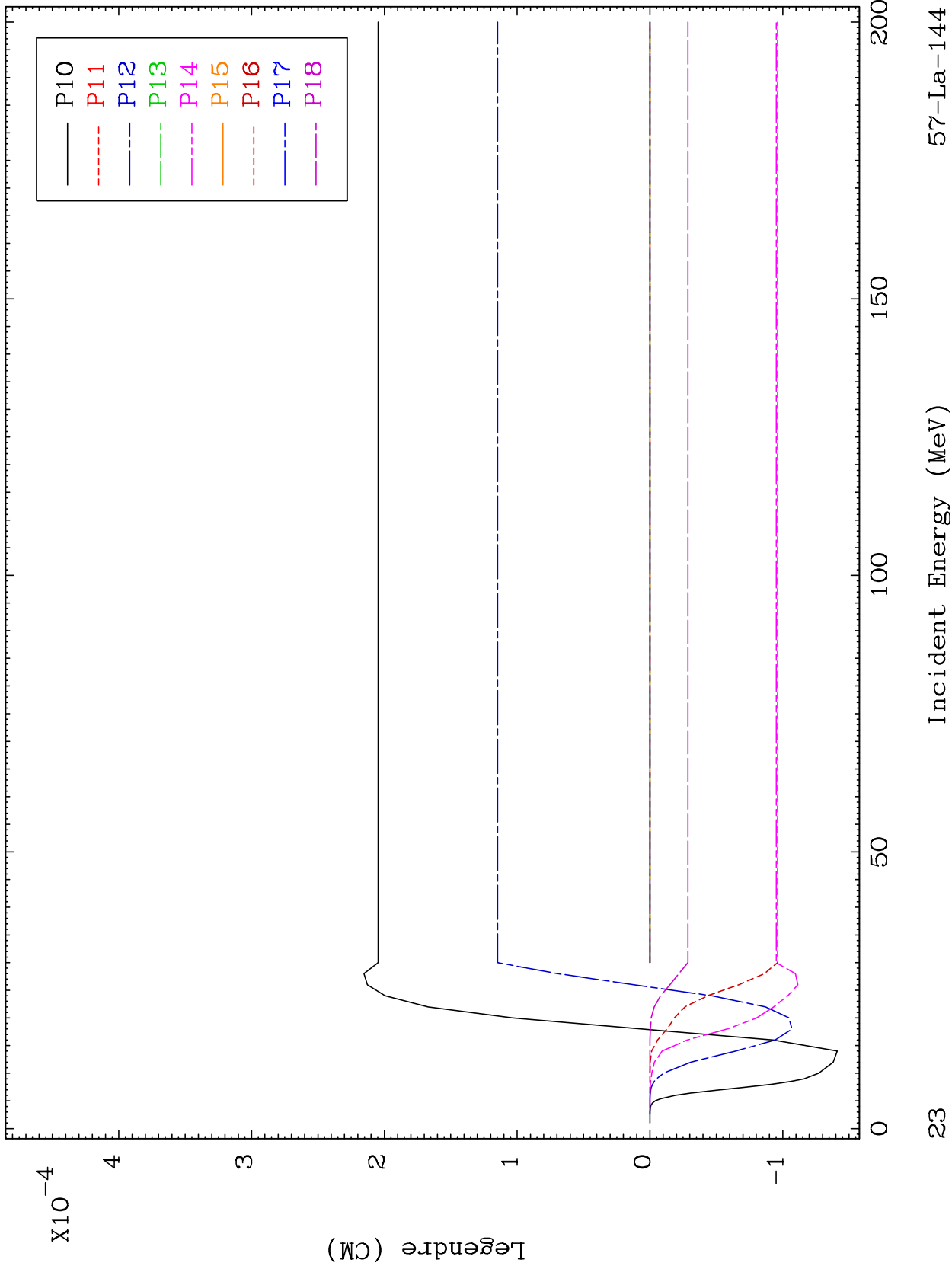
Incident Energy (MeV)

57-La-144

MAT 5743

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

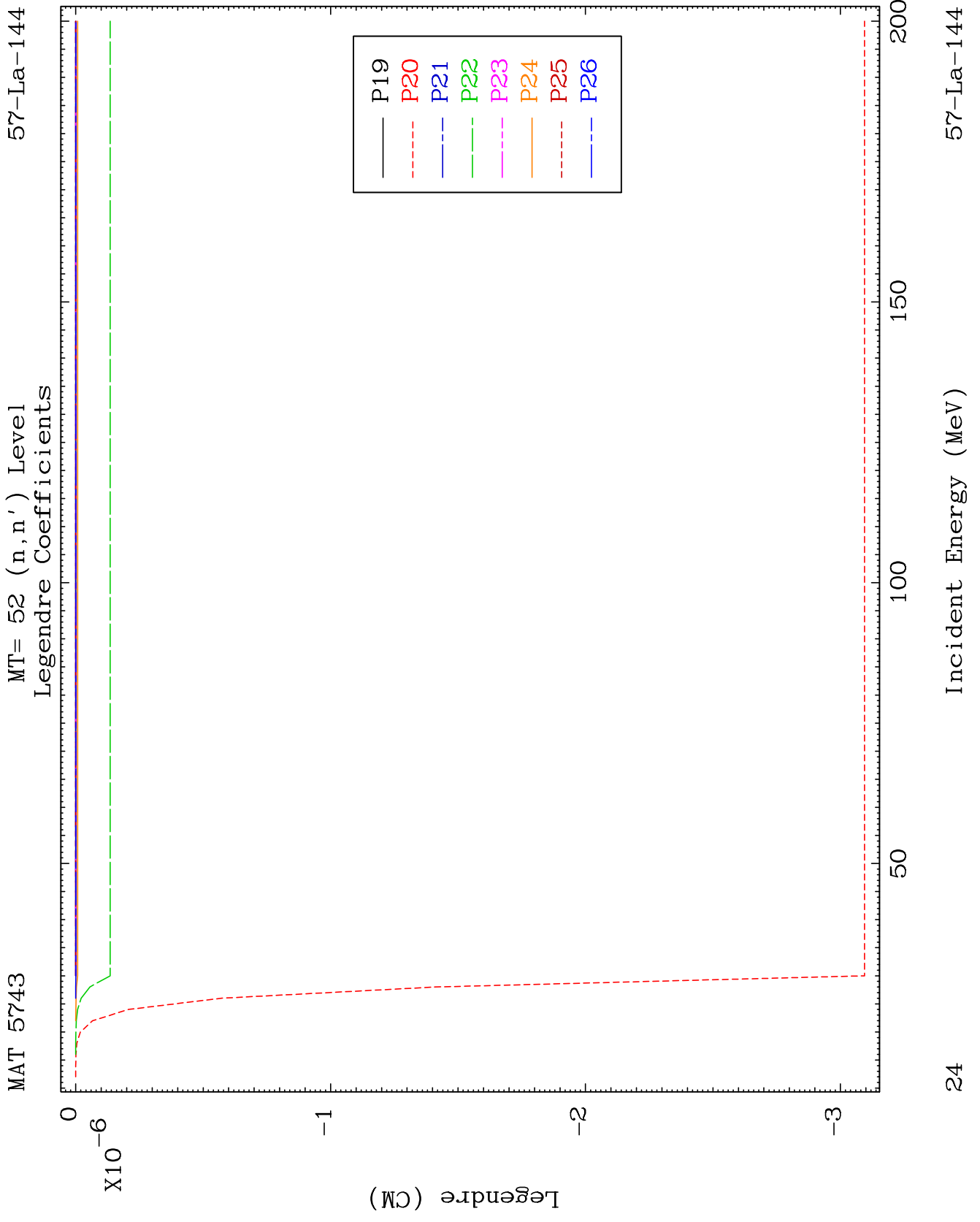
57-La-144

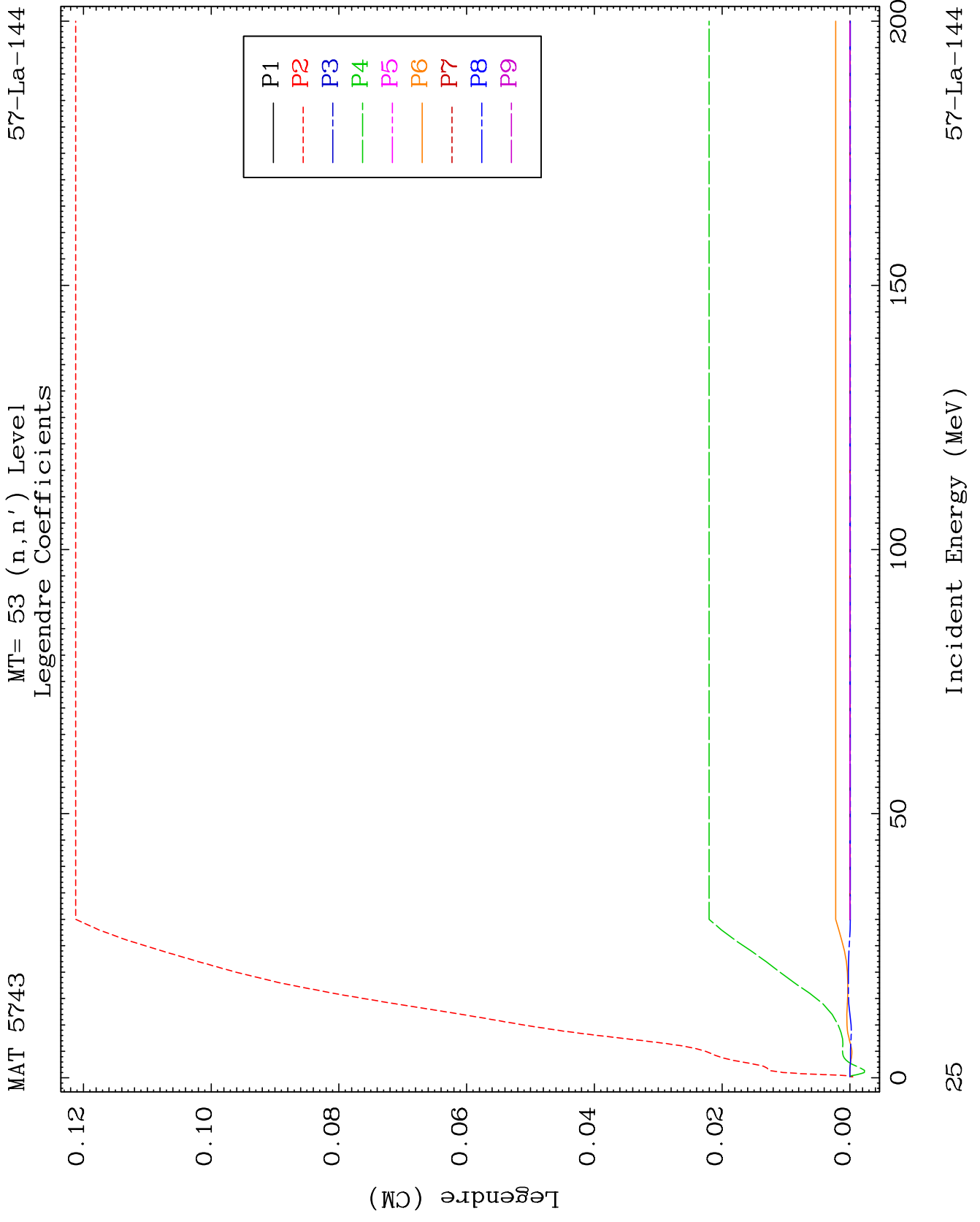


23

Incident Energy (MeV)

57-La-144

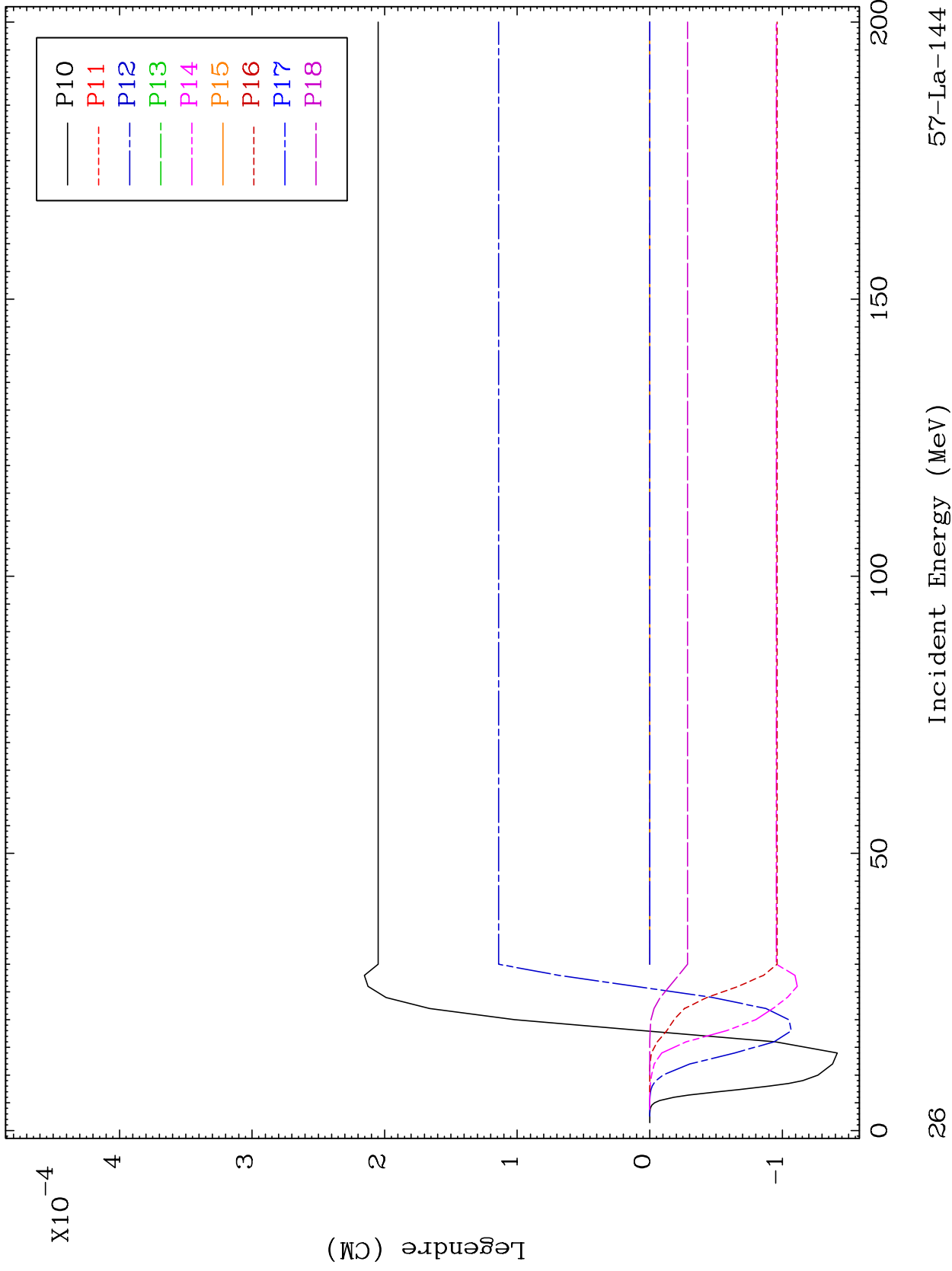




MAT 5743

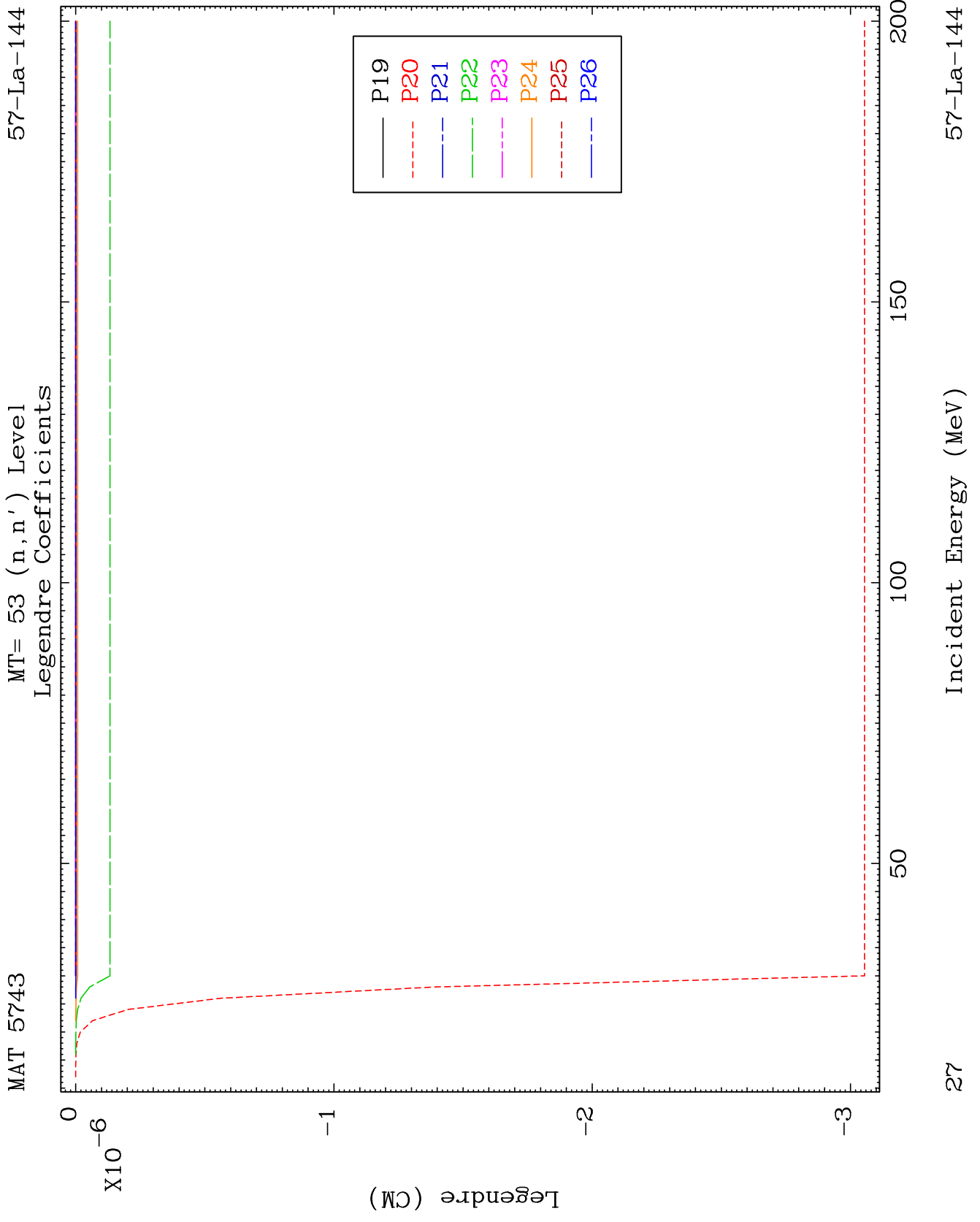
MT= 53 (n,n') Level  
Legendre Coefficients

57-La-144



26

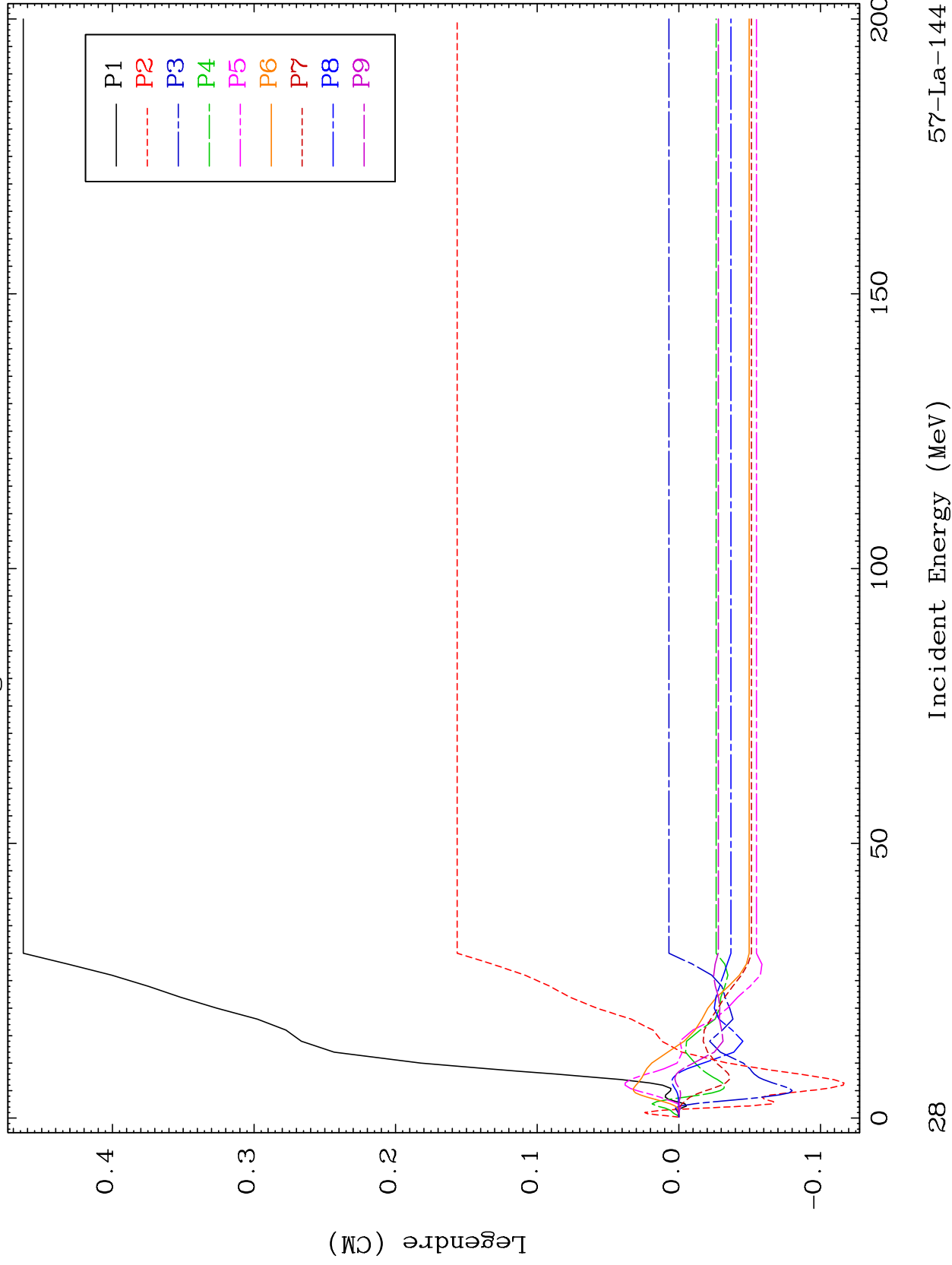
57-La-144



MAT 5743

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

57-La-144



57-La-144

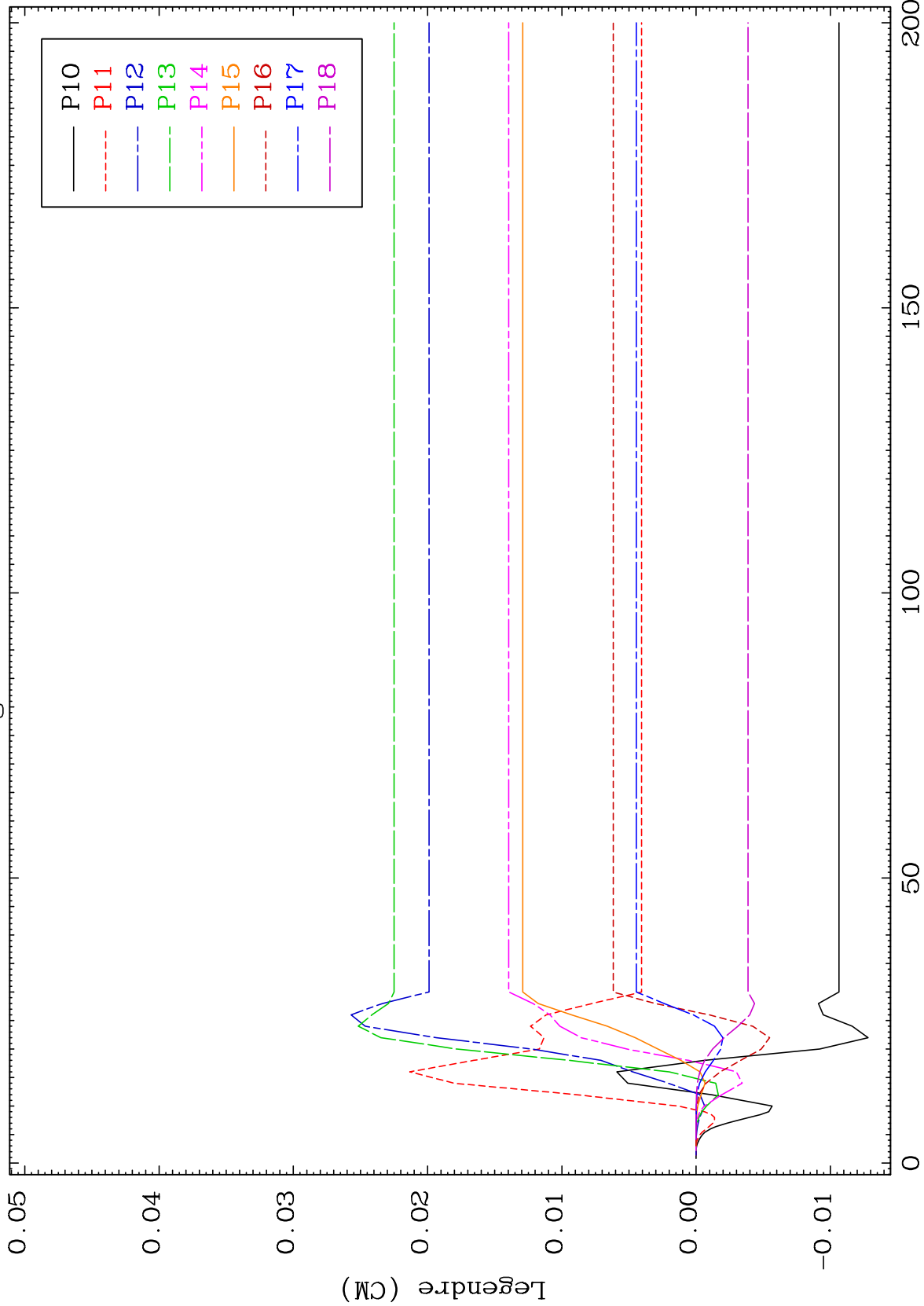
Incident Energy (MeV)

28

MAT 5743

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

57-La-144



29

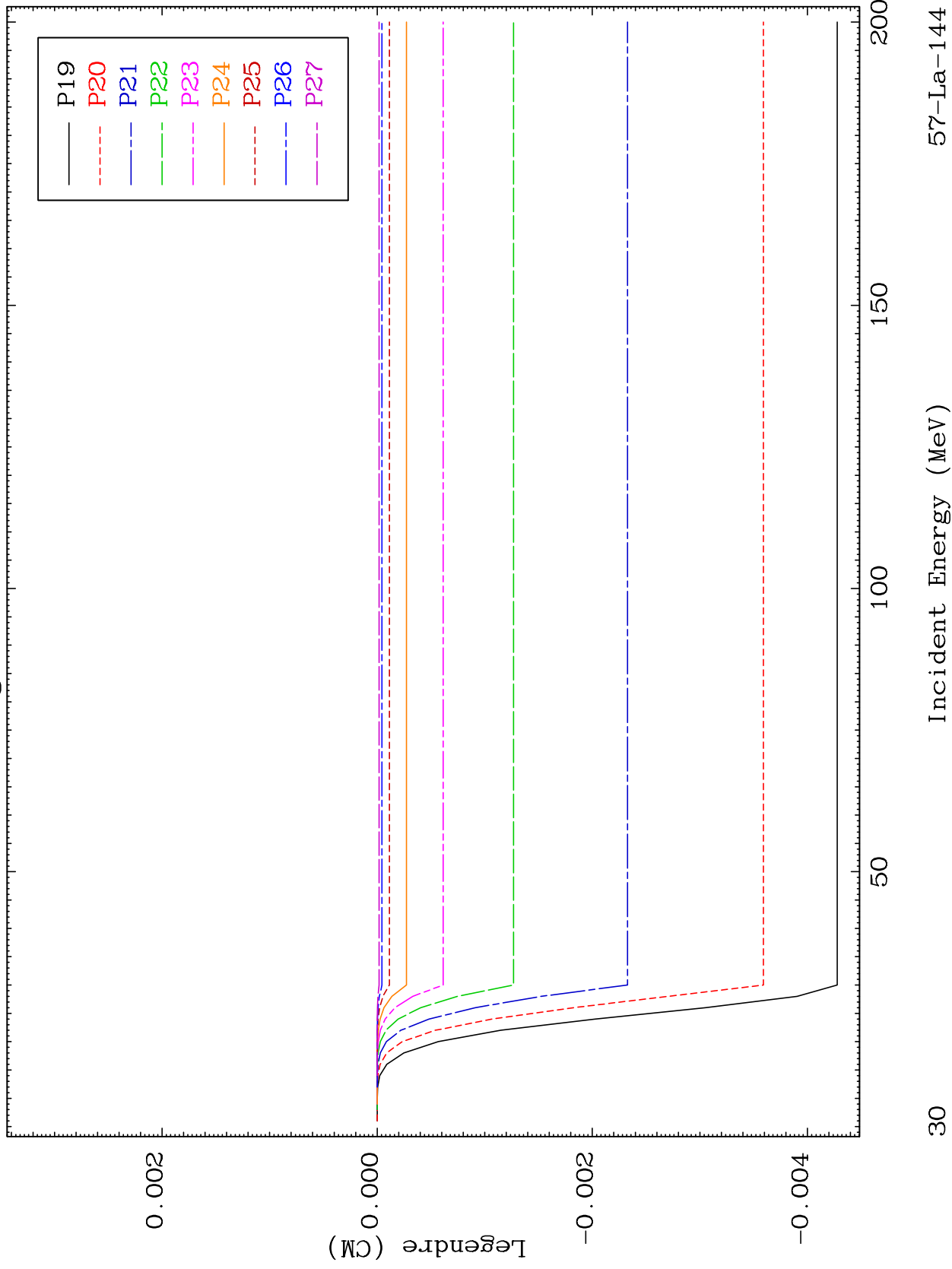
Incident Energy (MeV)

57-La-144

MAT 5743

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

57-La-144



57-La-144

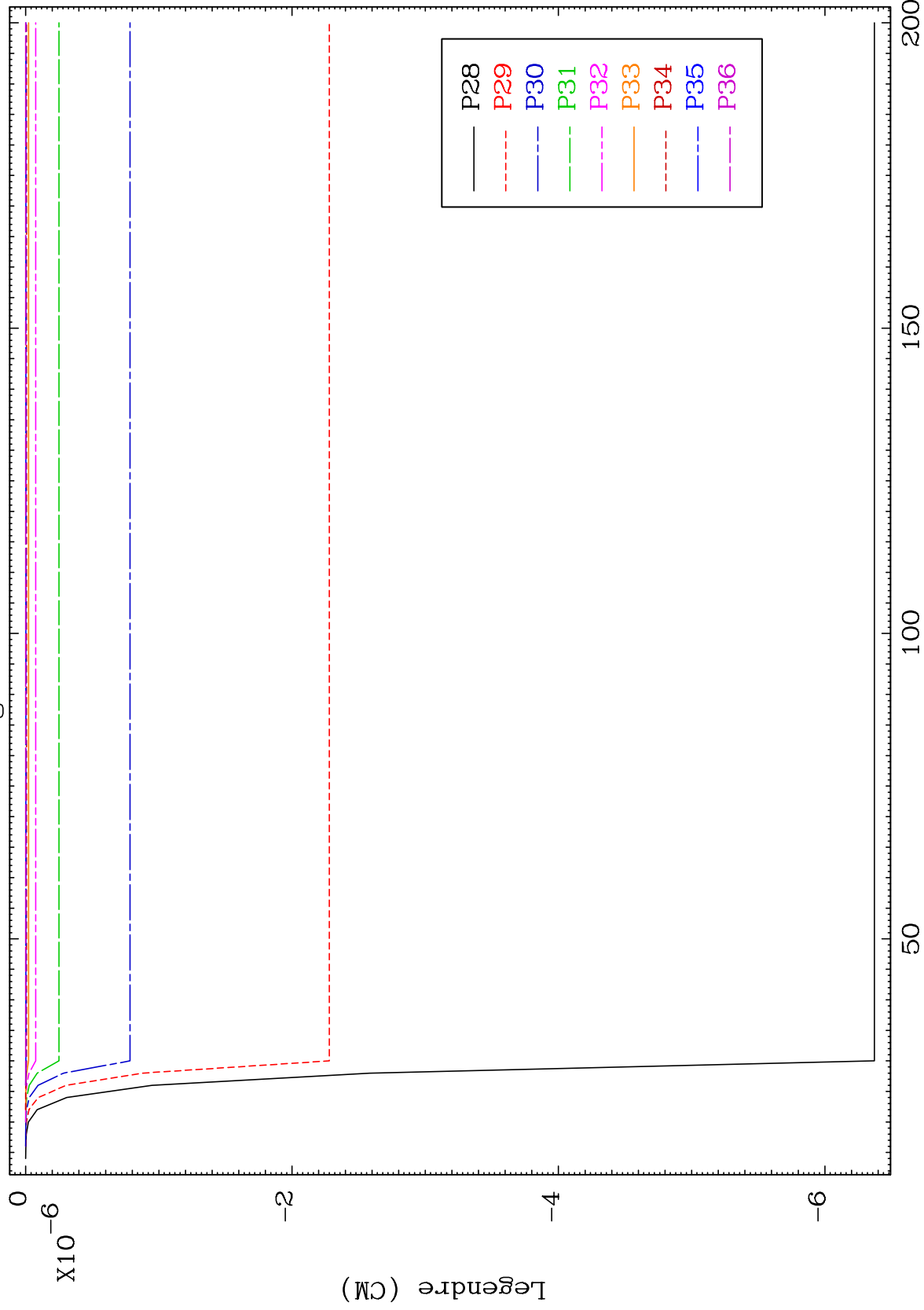
Incident Energy (MeV)

30

MAT 5743

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

57-La-144



31

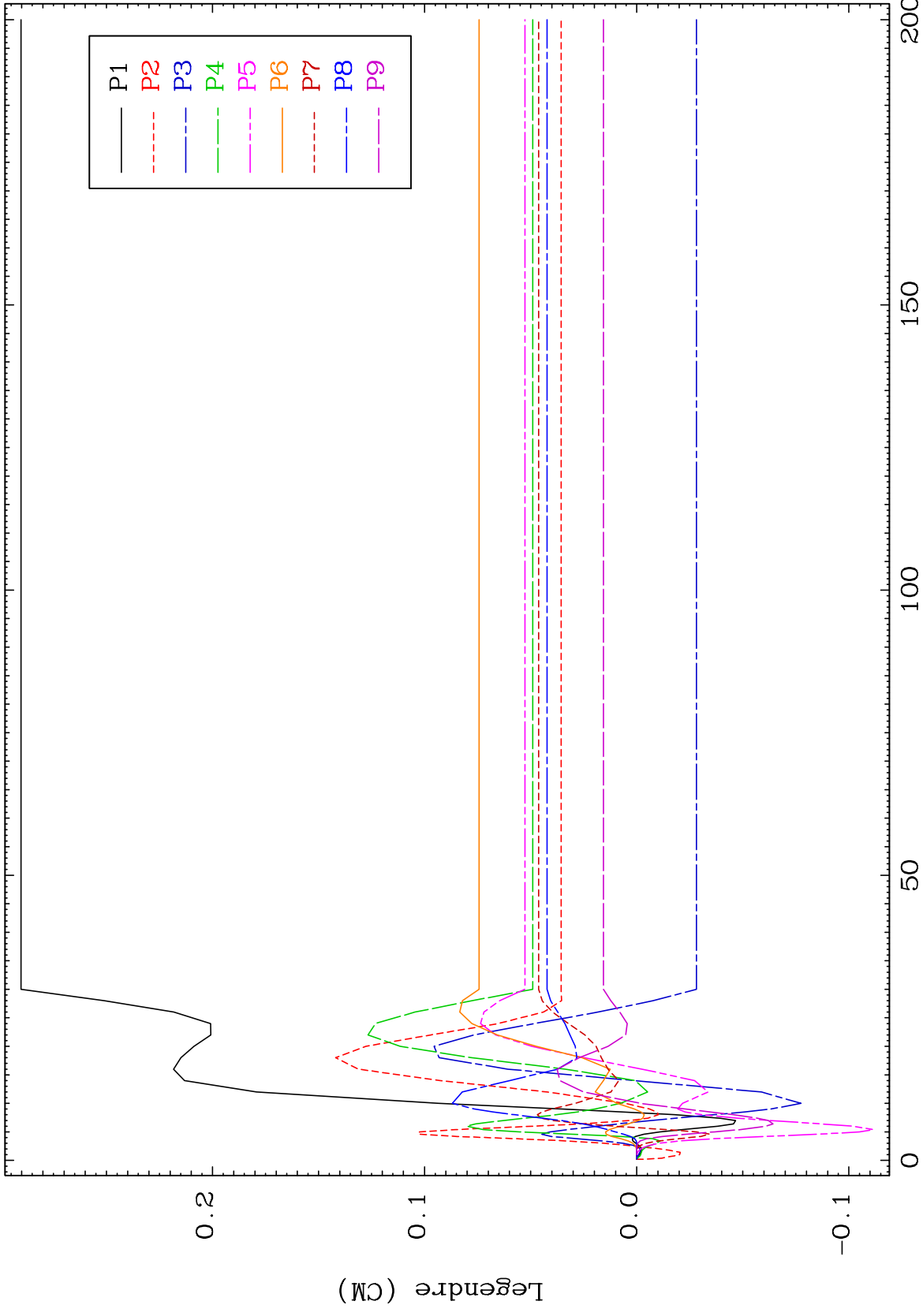
Incident Energy (MeV)

57-La-144

MAT 5743

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

57-La-144

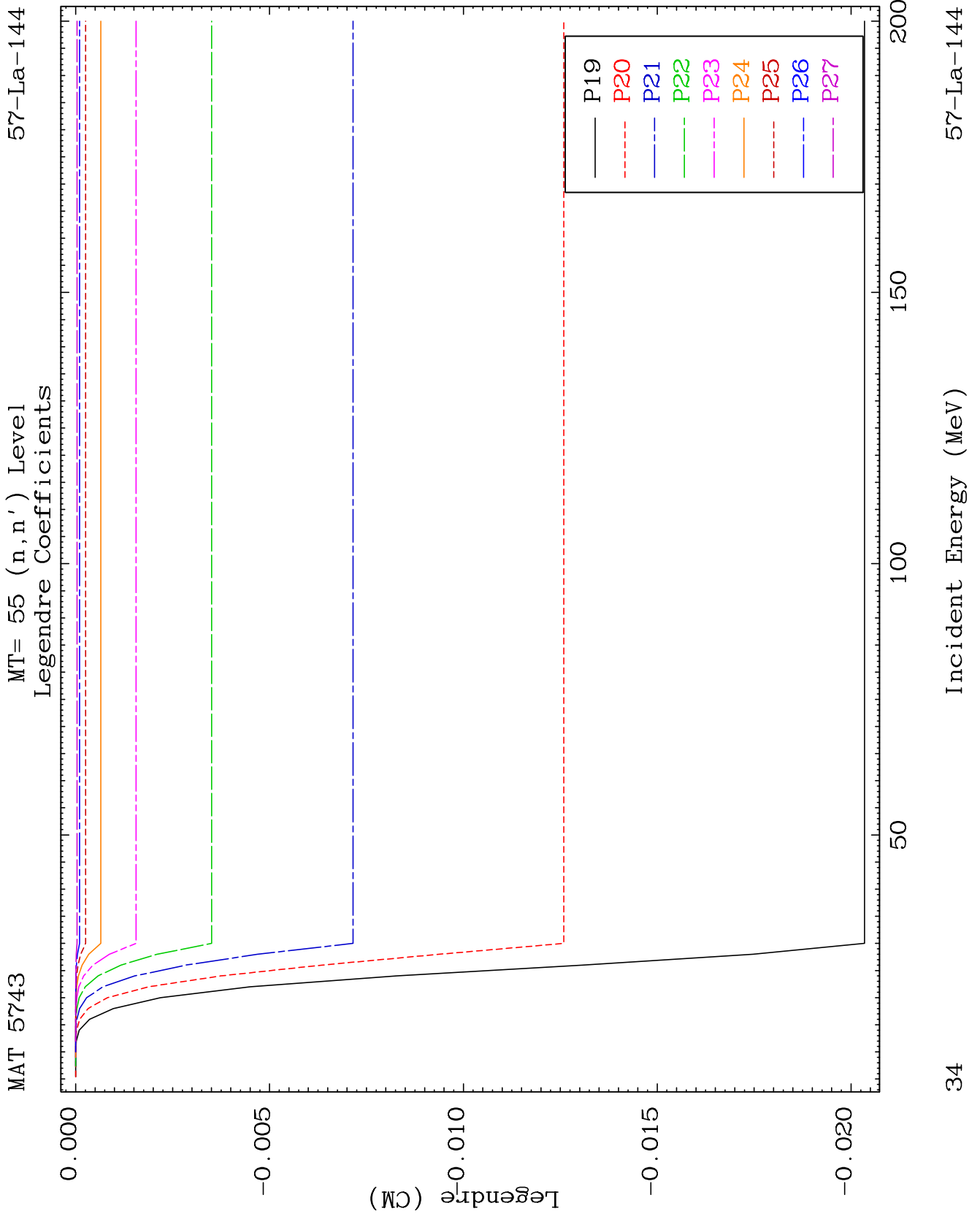


32

Incident Energy (MeV)

57-La-144

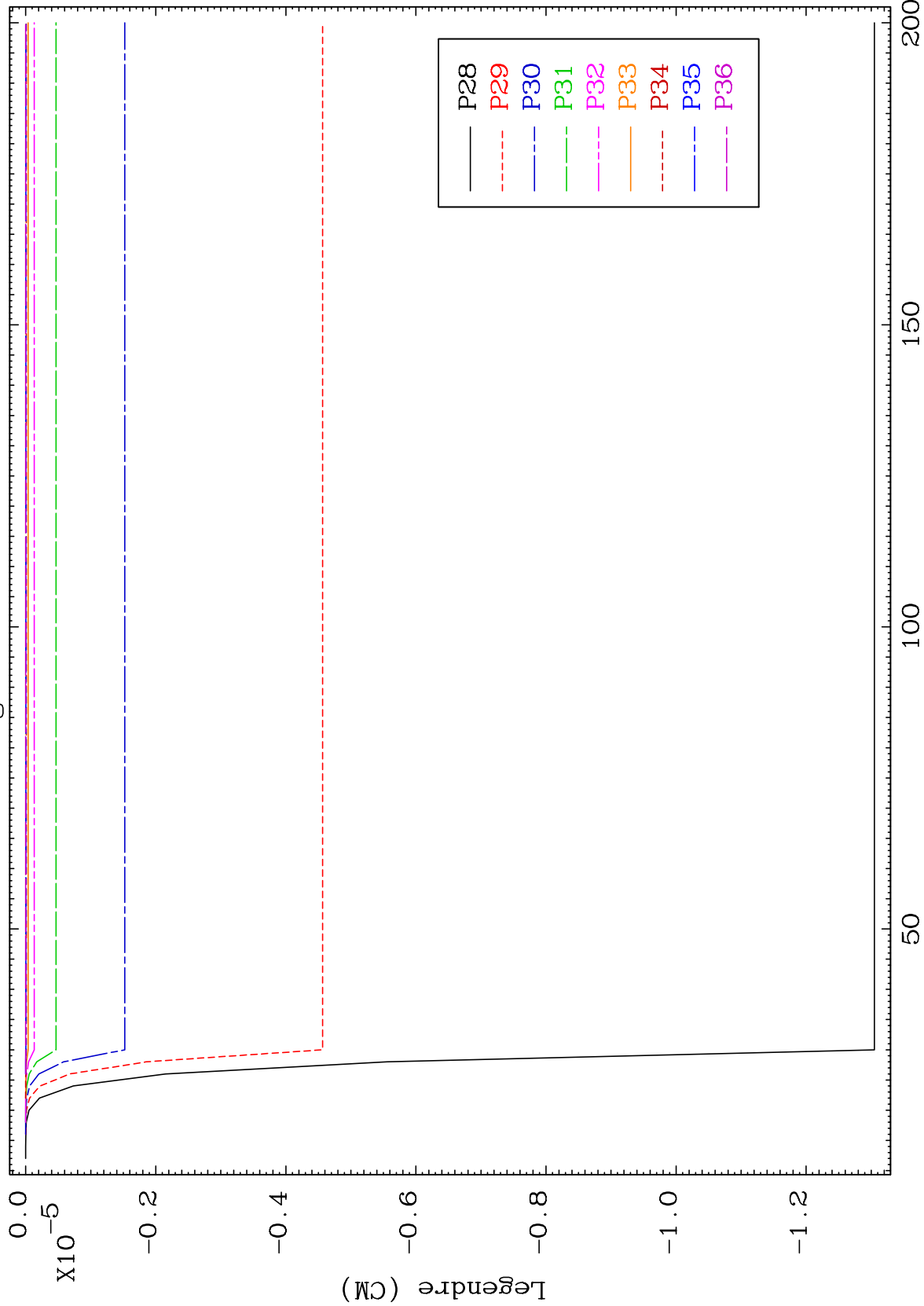




MAT 5743

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

57-La-144



57-La-144

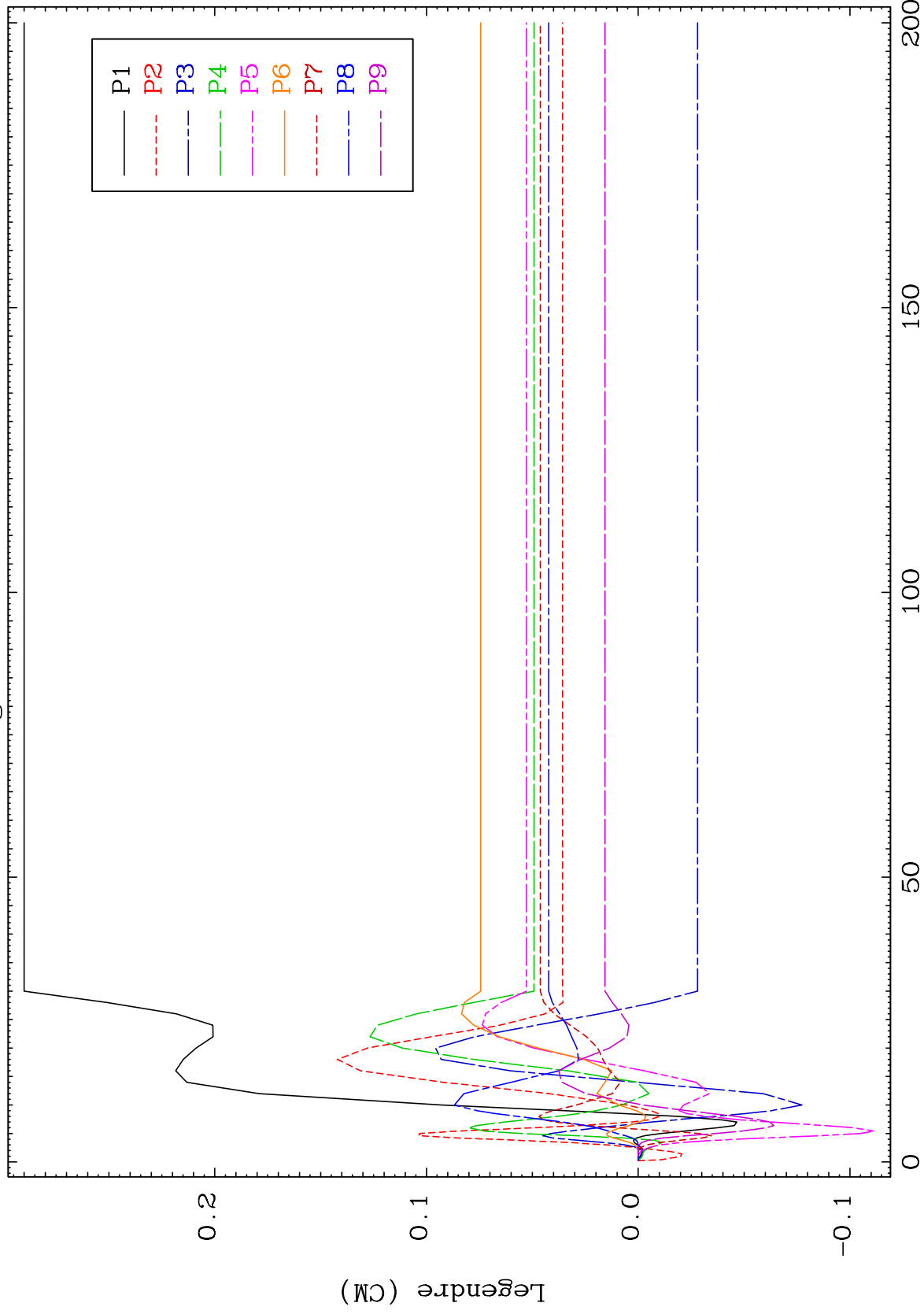
Incident Energy (MeV)

35

MAT 5743

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

57-La-144



36

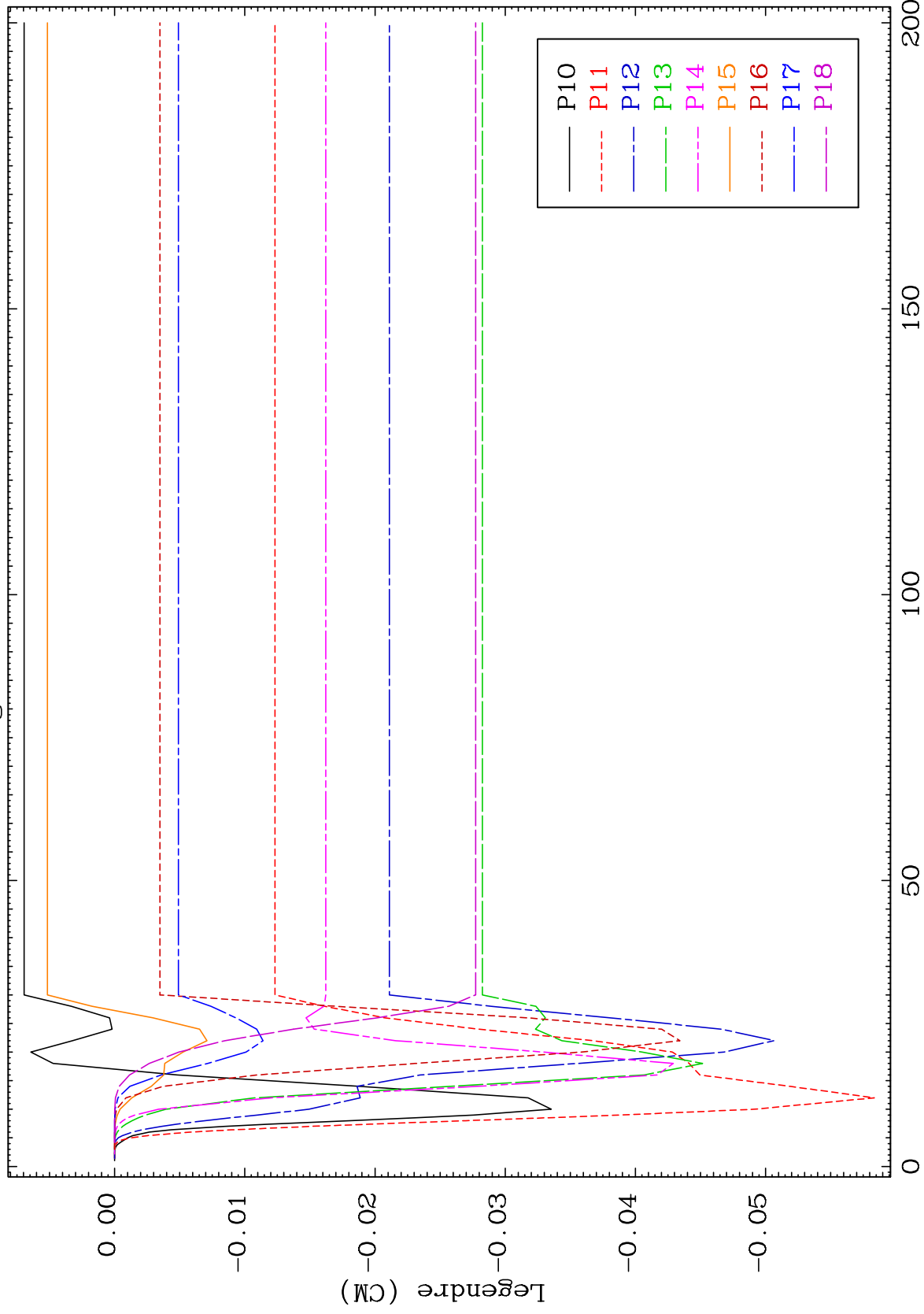
Incident Energy (MeV)

57-La-144

MAT 5743

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

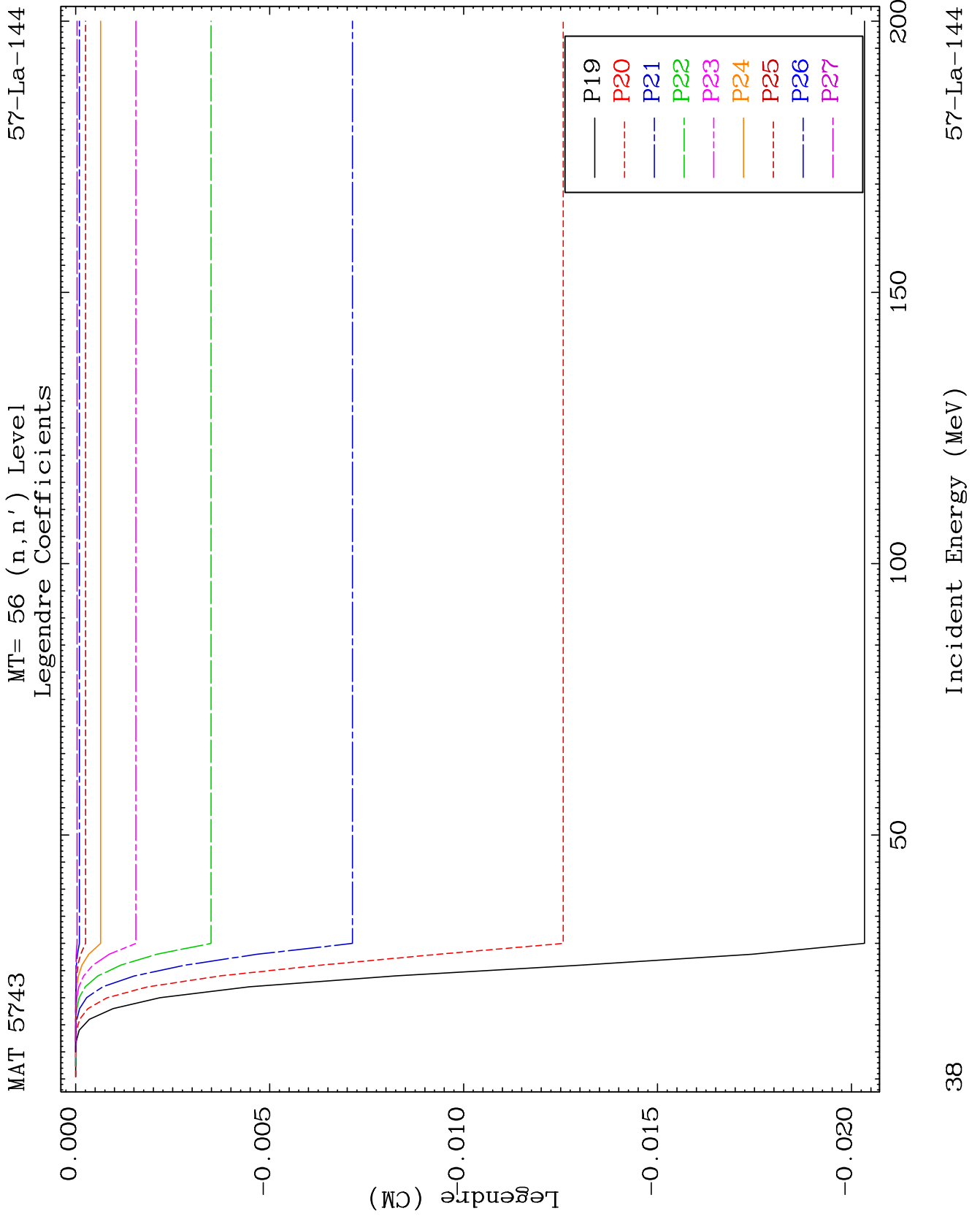
57-La-144

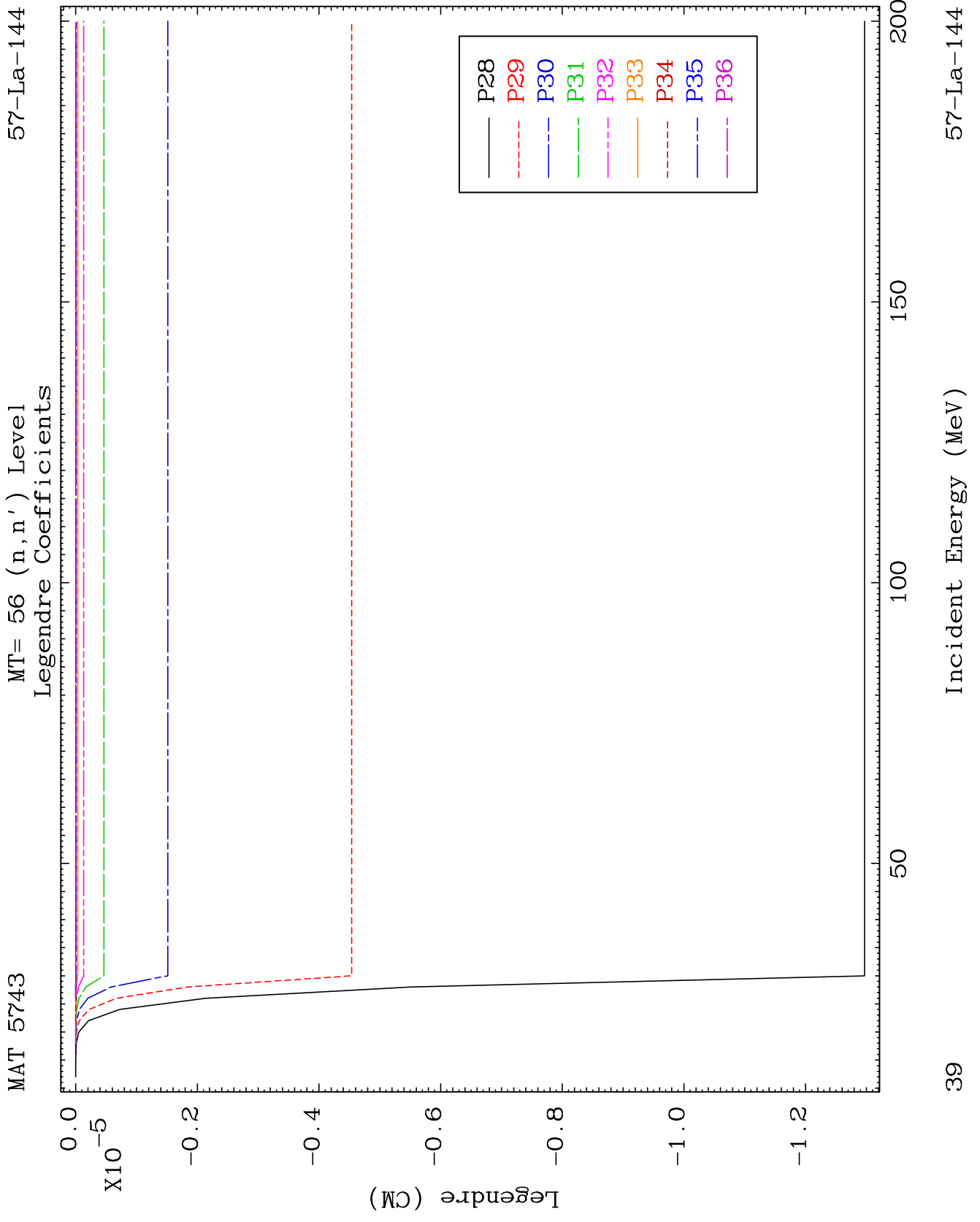


37

Incident Energy (MeV)

57-La-144

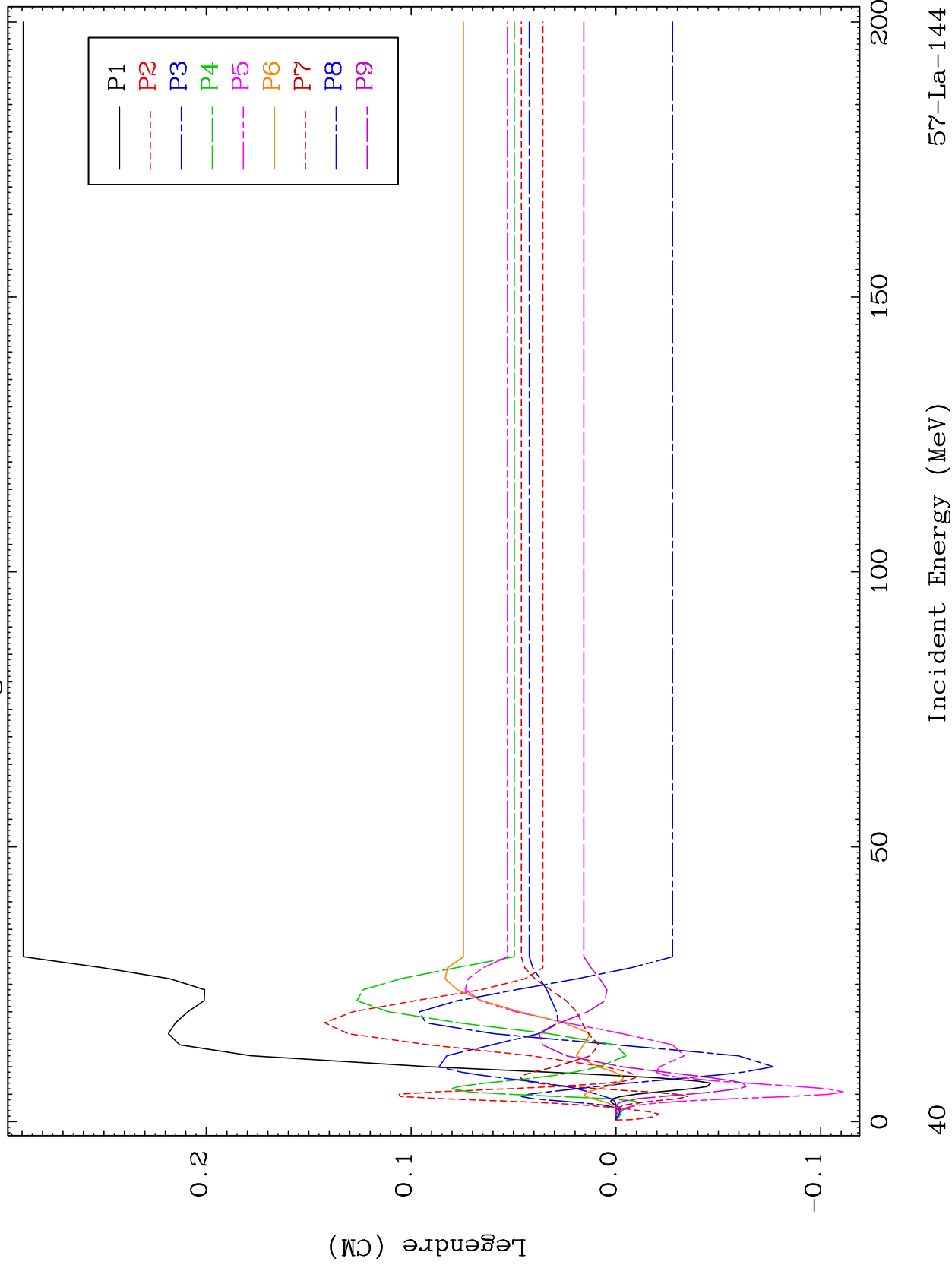




MAT 5743

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

57-La-144



57-La-144

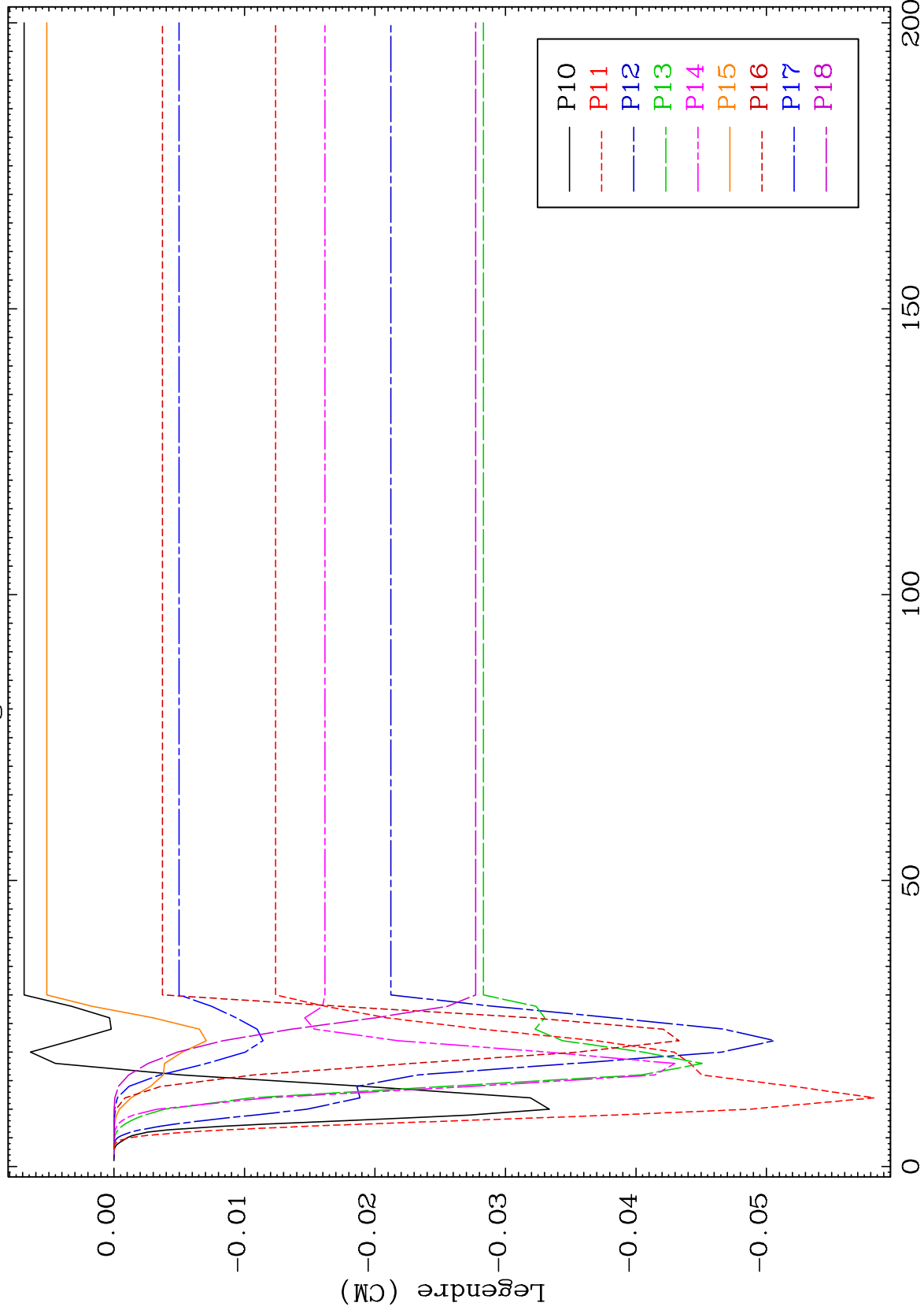
Incident Energy (MeV)

40

MAT 5743

57-La-144

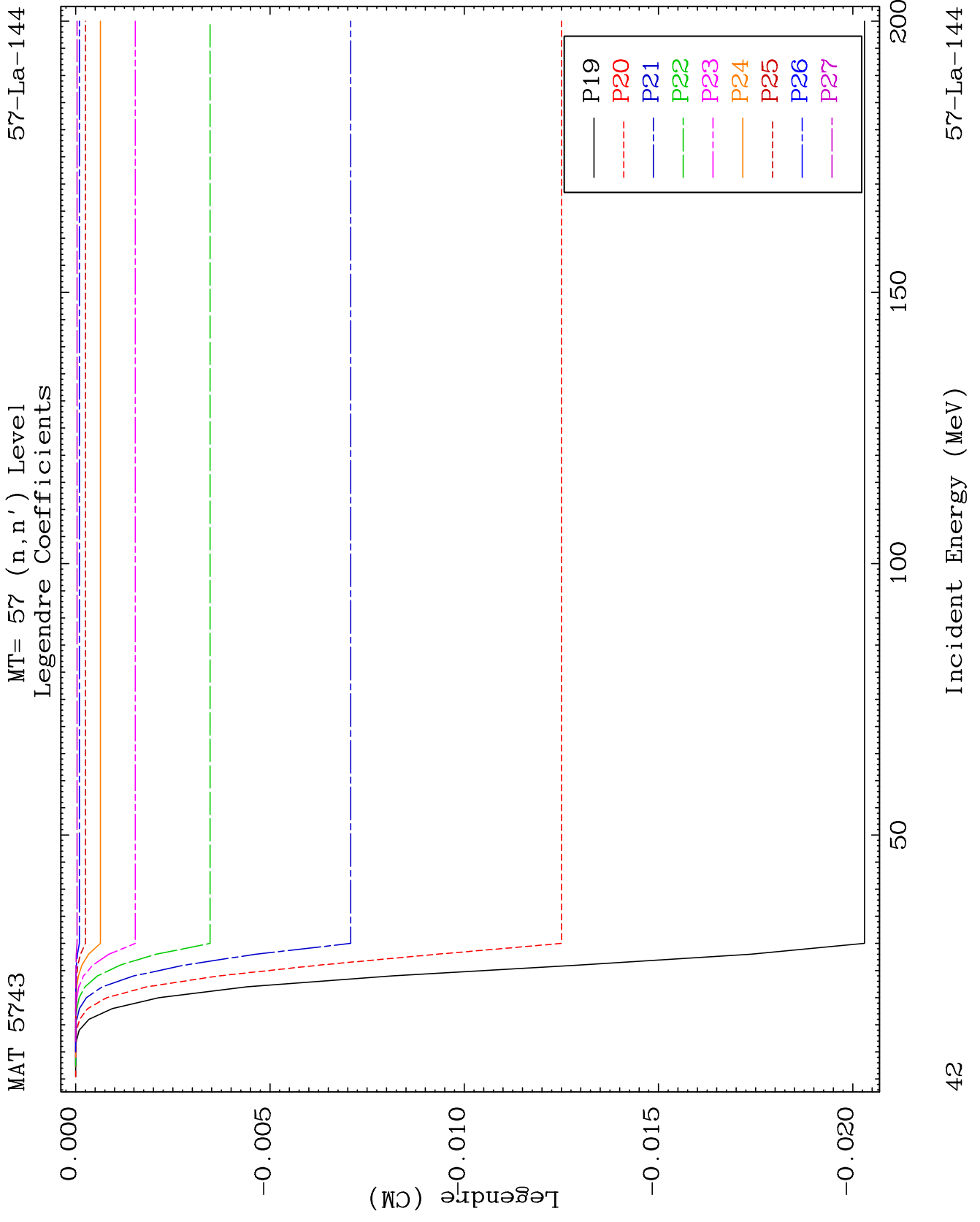
MT= 57 (n,n') Level  
Legendre Coefficients

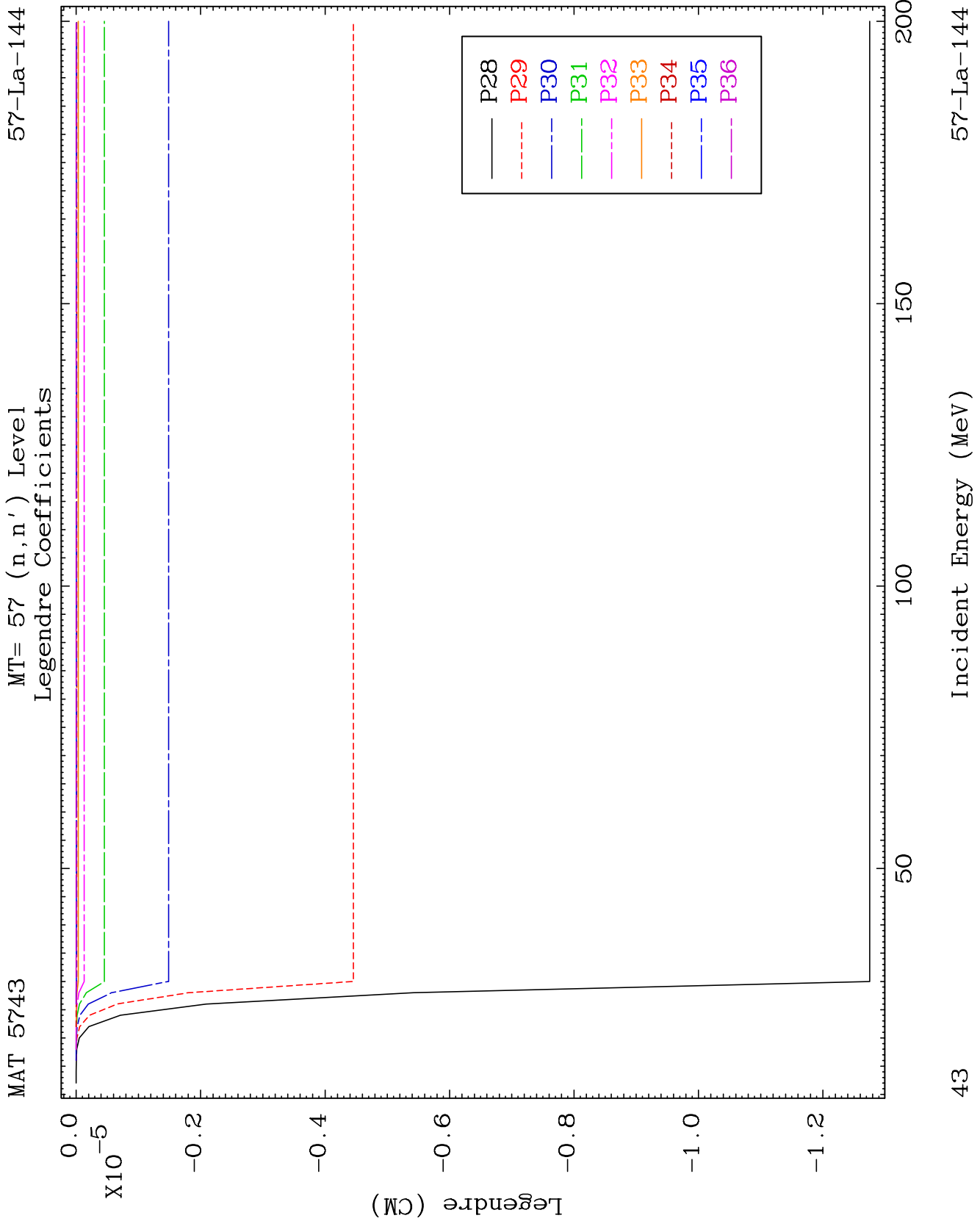


41

Incident Energy (MeV)

57-La-144

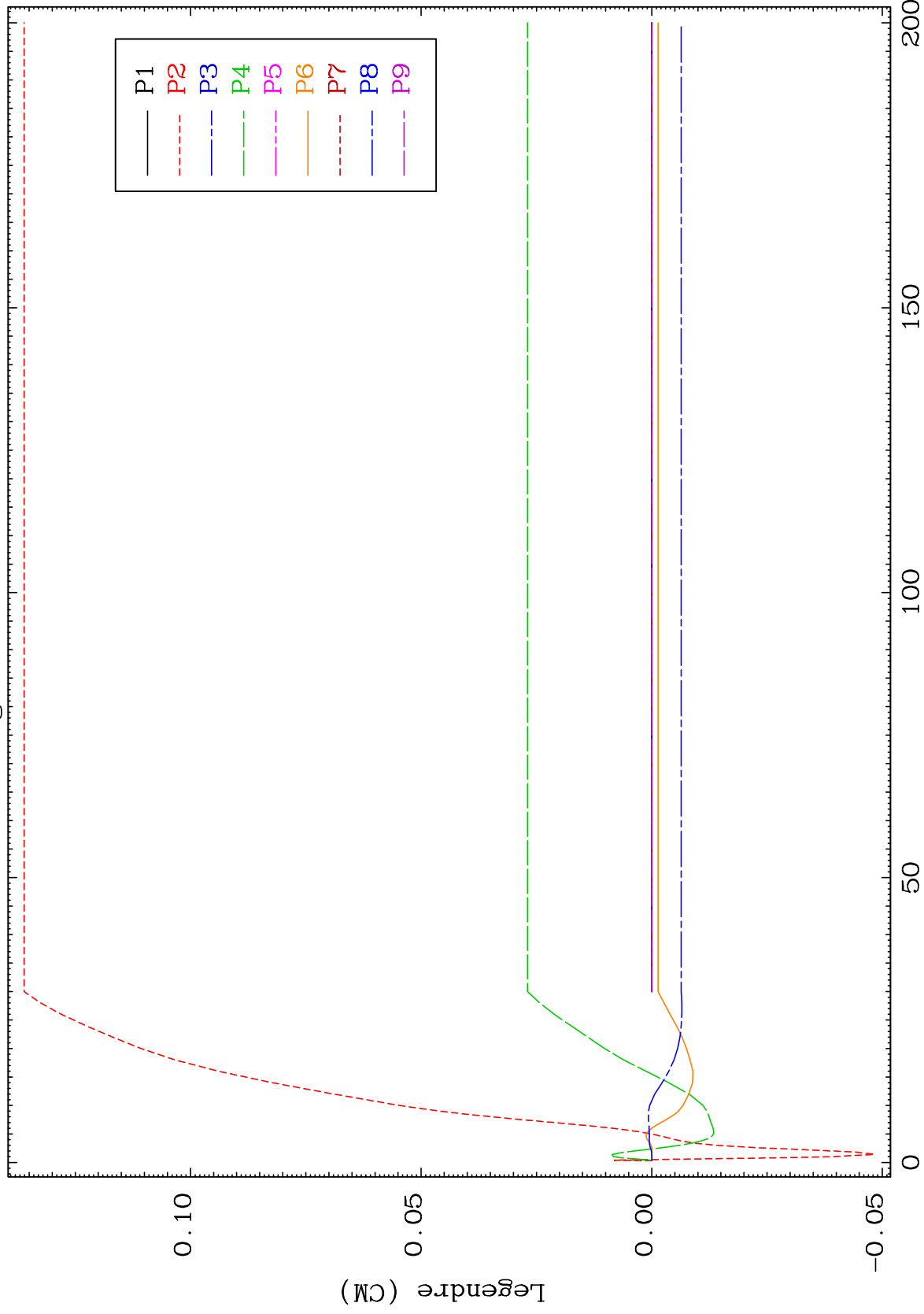




MAT 5743

MT= 58 (n,n') Level  
Legendre Coefficients

57-La-144



57-La-144

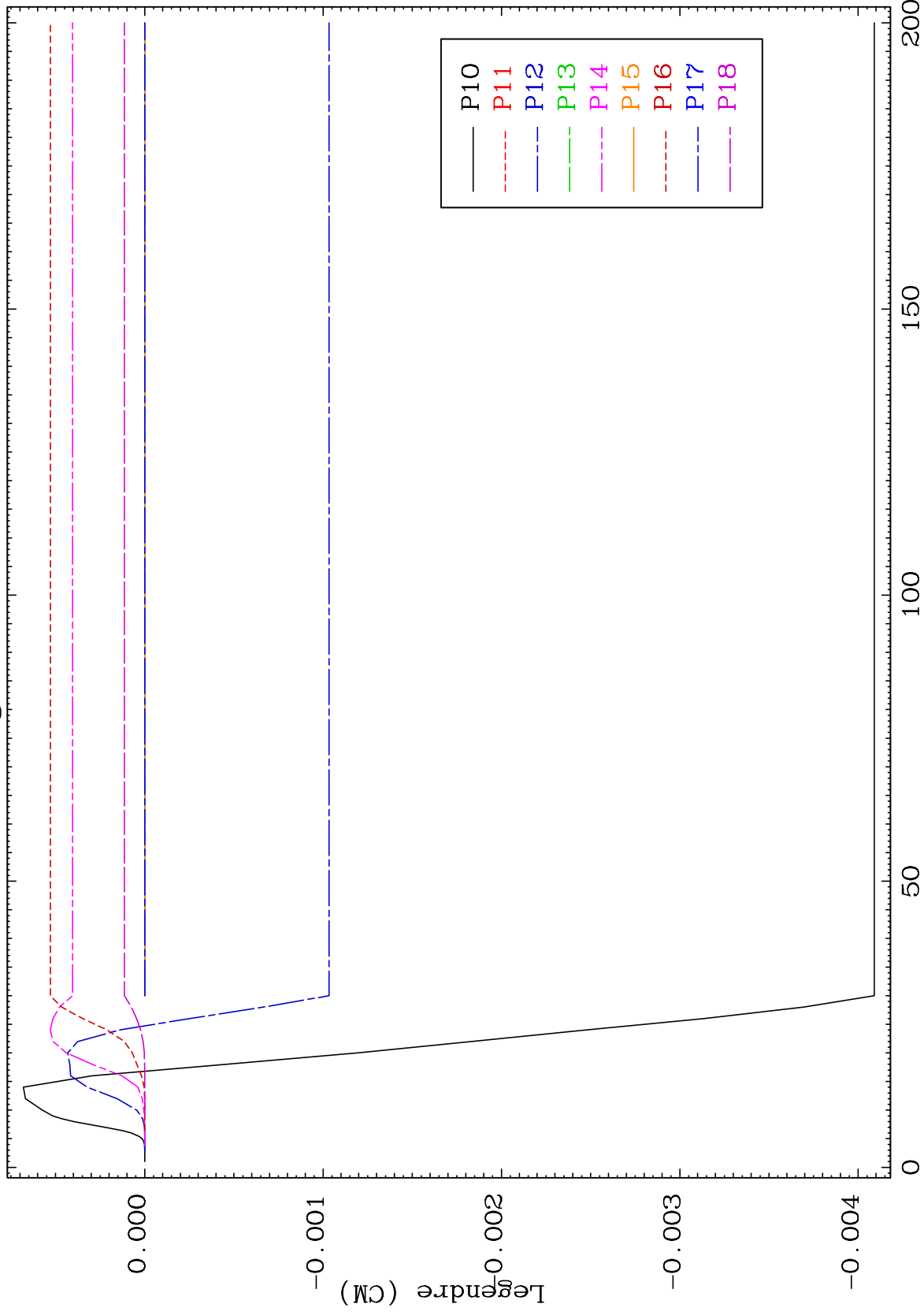
Incident Energy (MeV)

44

MAT 5743

MT= 58 (n,n') Level  
Legendre Coefficients

57-La-144



45

Incident Energy (MeV)

57-La-144

200

150

100

50

0

0.000

-0.001

-0.002

-0.003

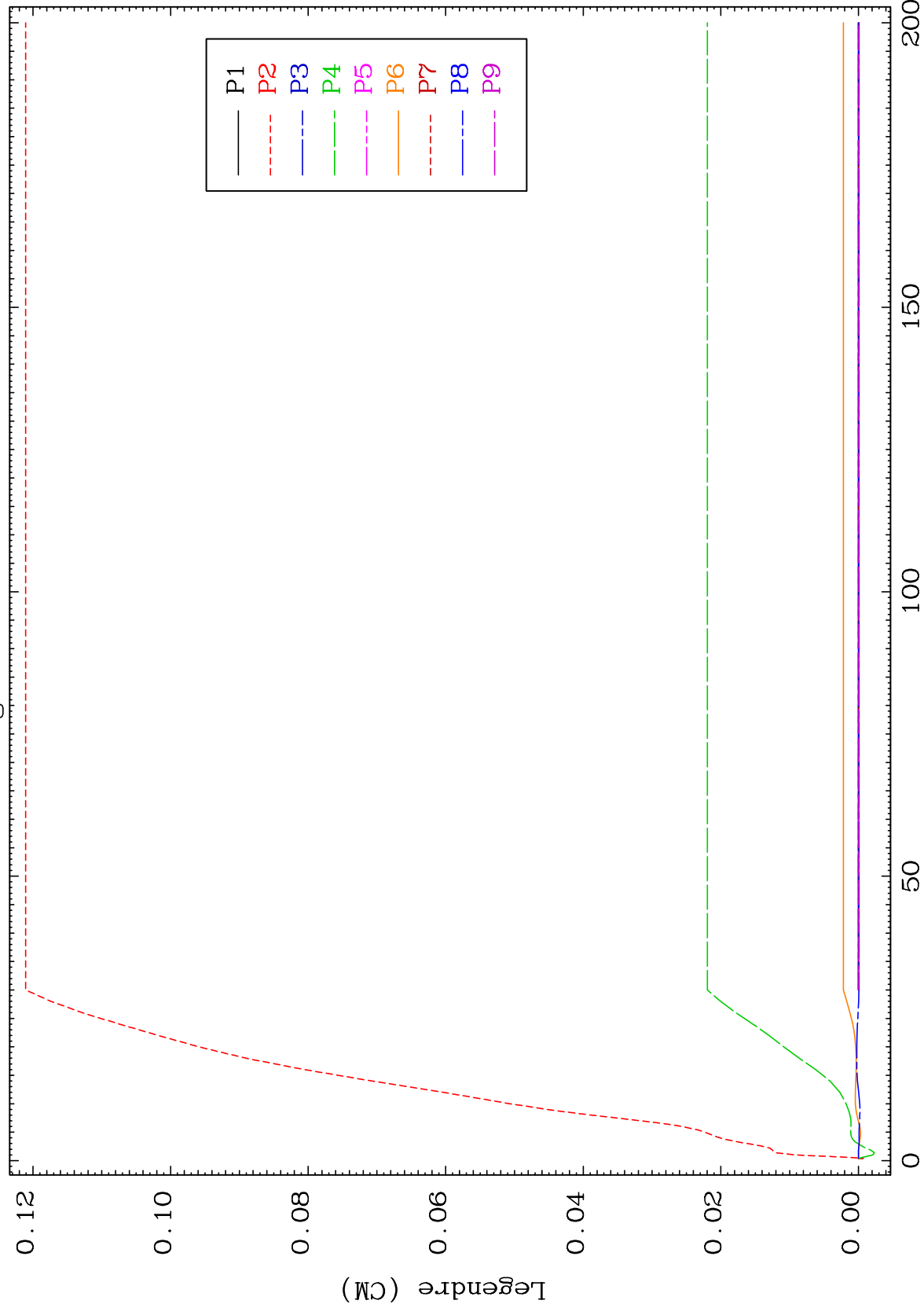
-0.004



MAT 5743

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

57-La-144



57-La-144

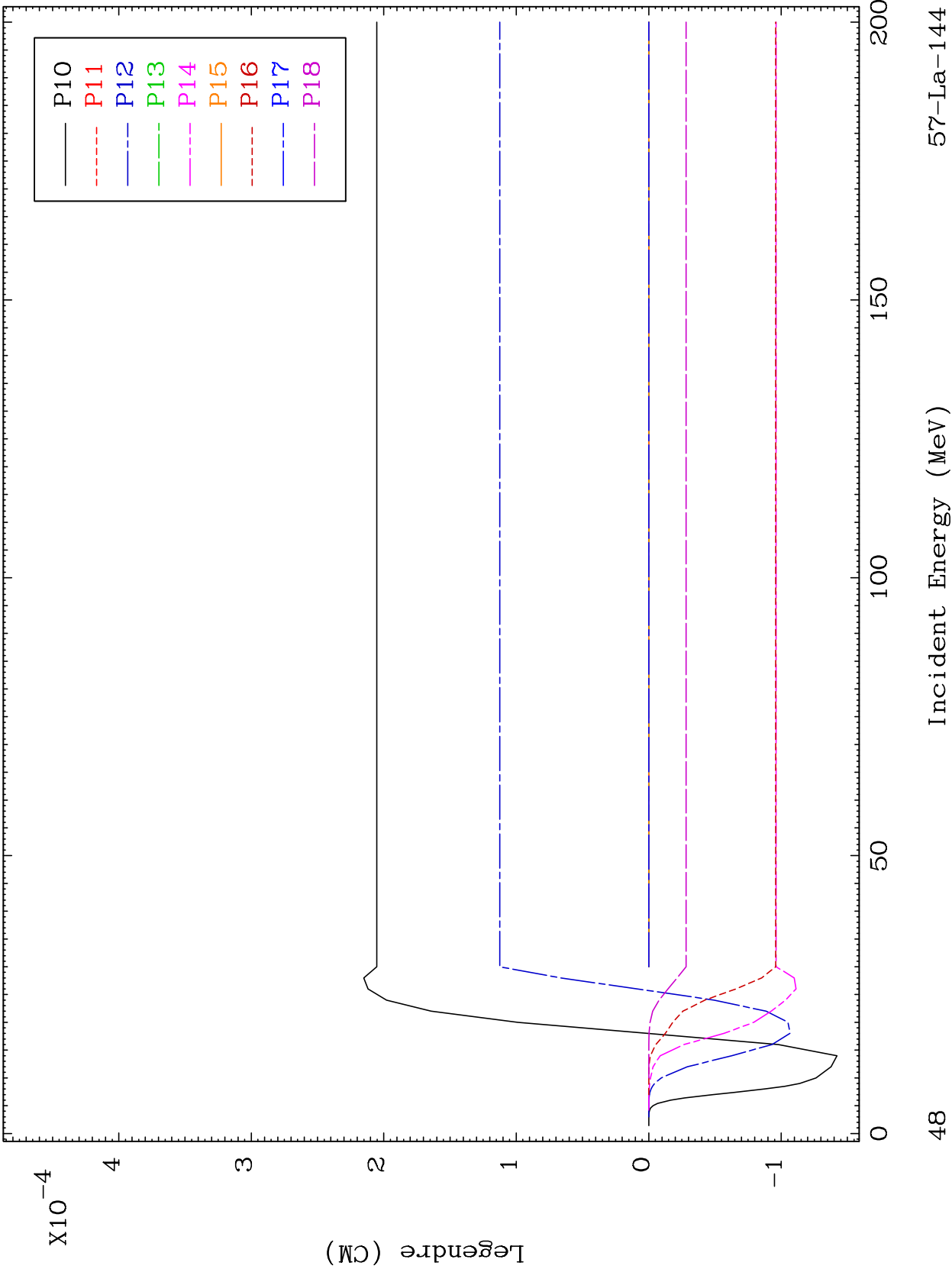
Incident Energy (MeV)

47

MAT 5743

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

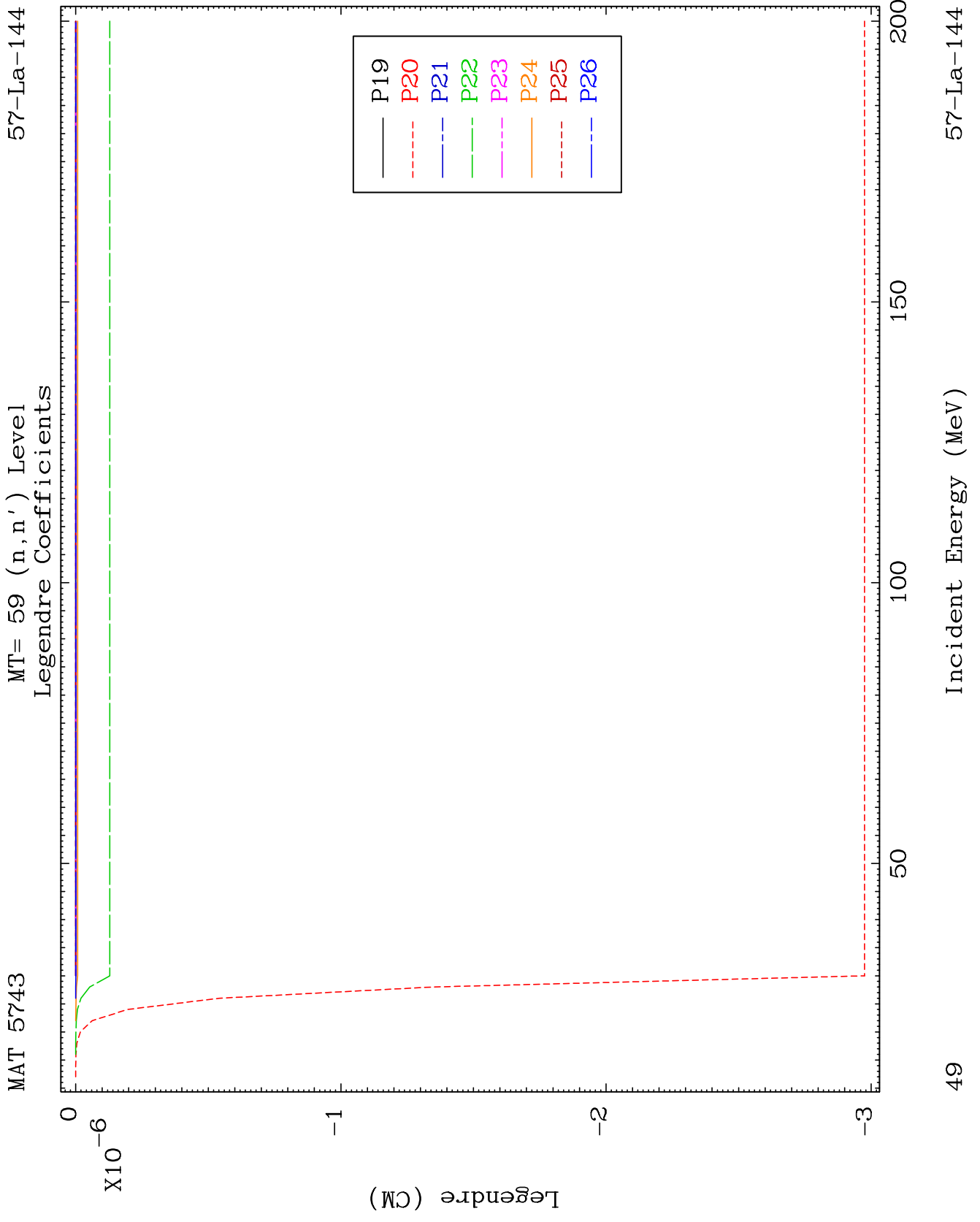
57-La-144



57-La-144

Incident Energy (MeV)

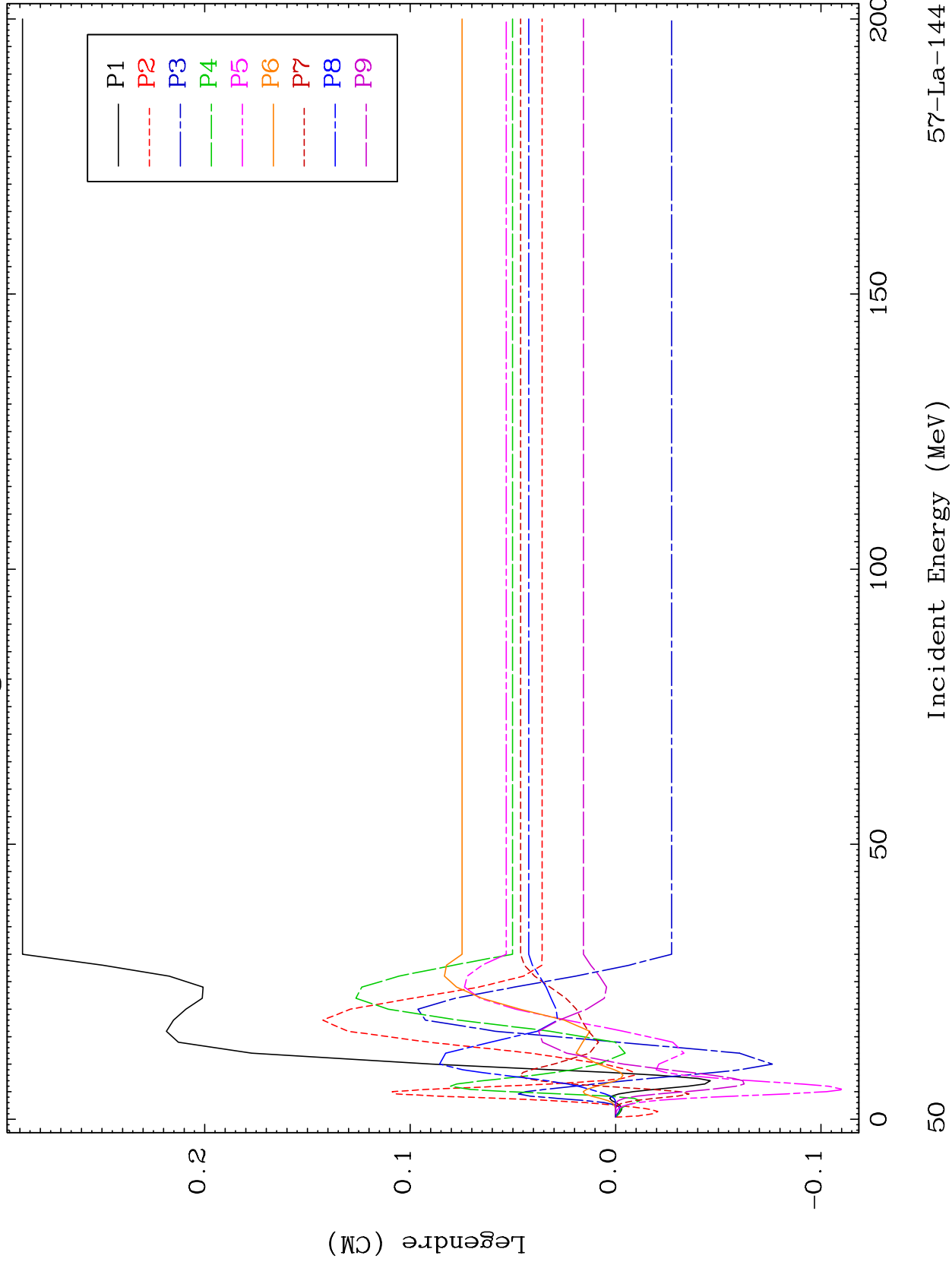
48



MAT 5743

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

57-La-144



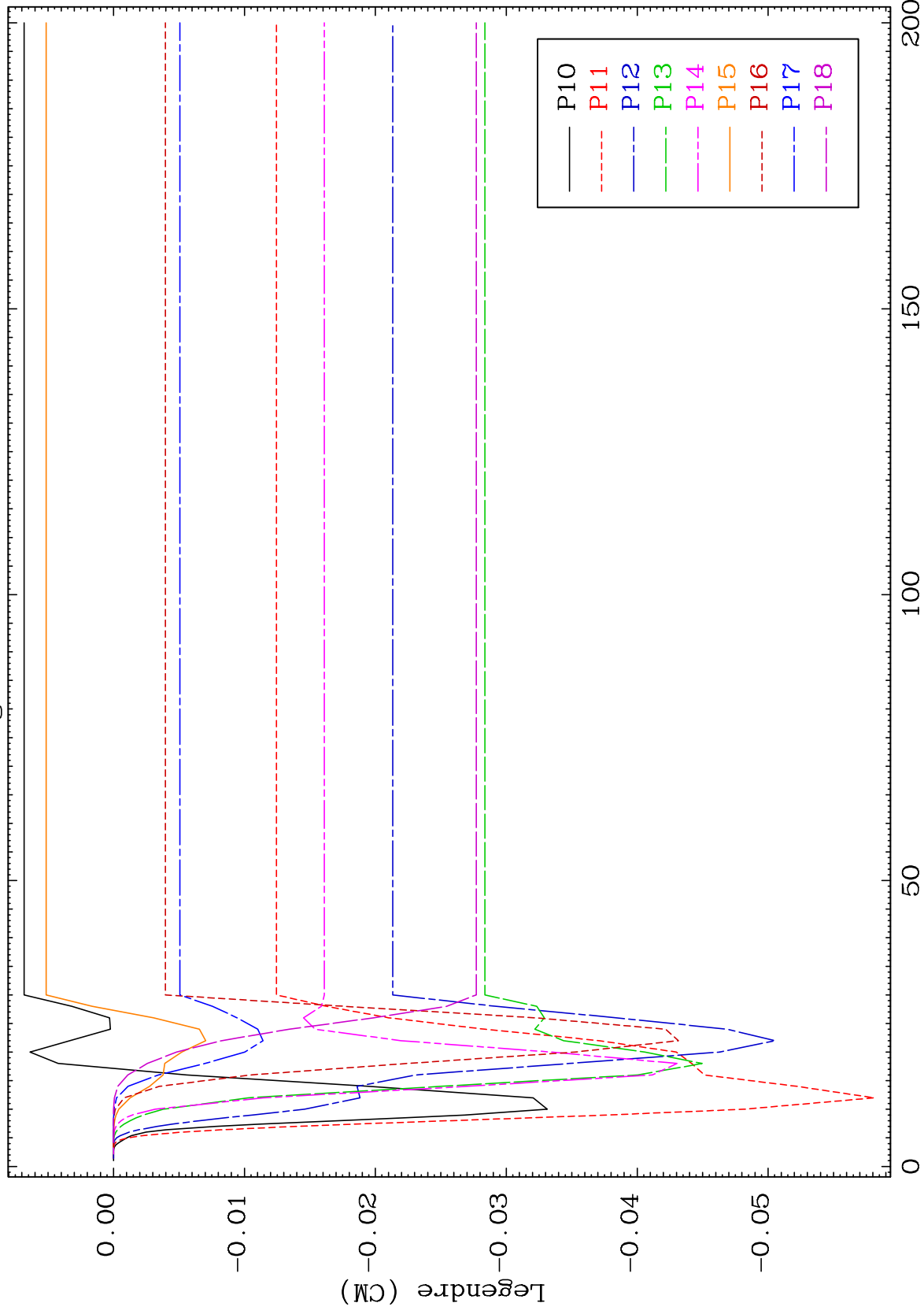
57-La-144

Incident Energy (MeV)

MAT 5743

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

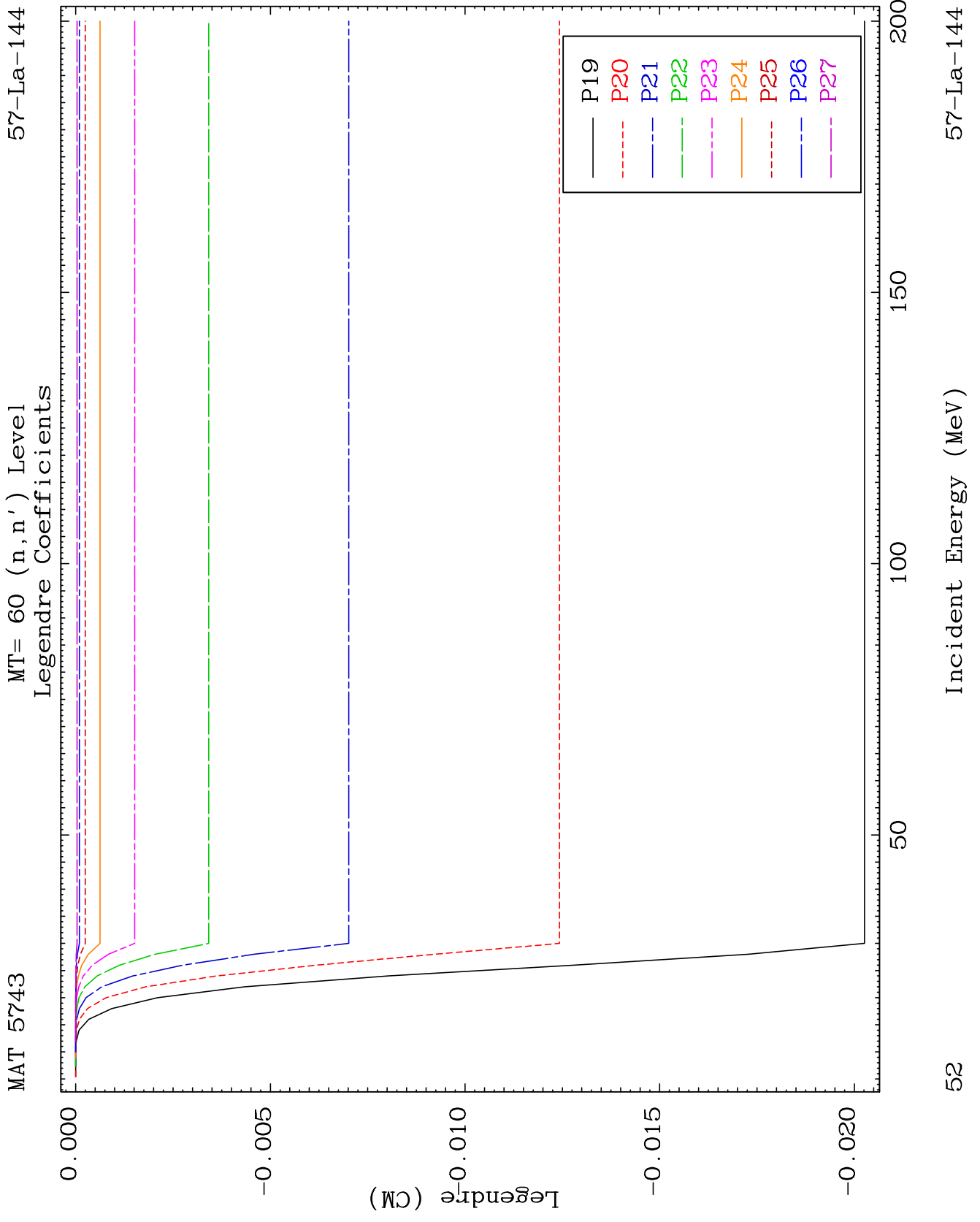
57-La-144

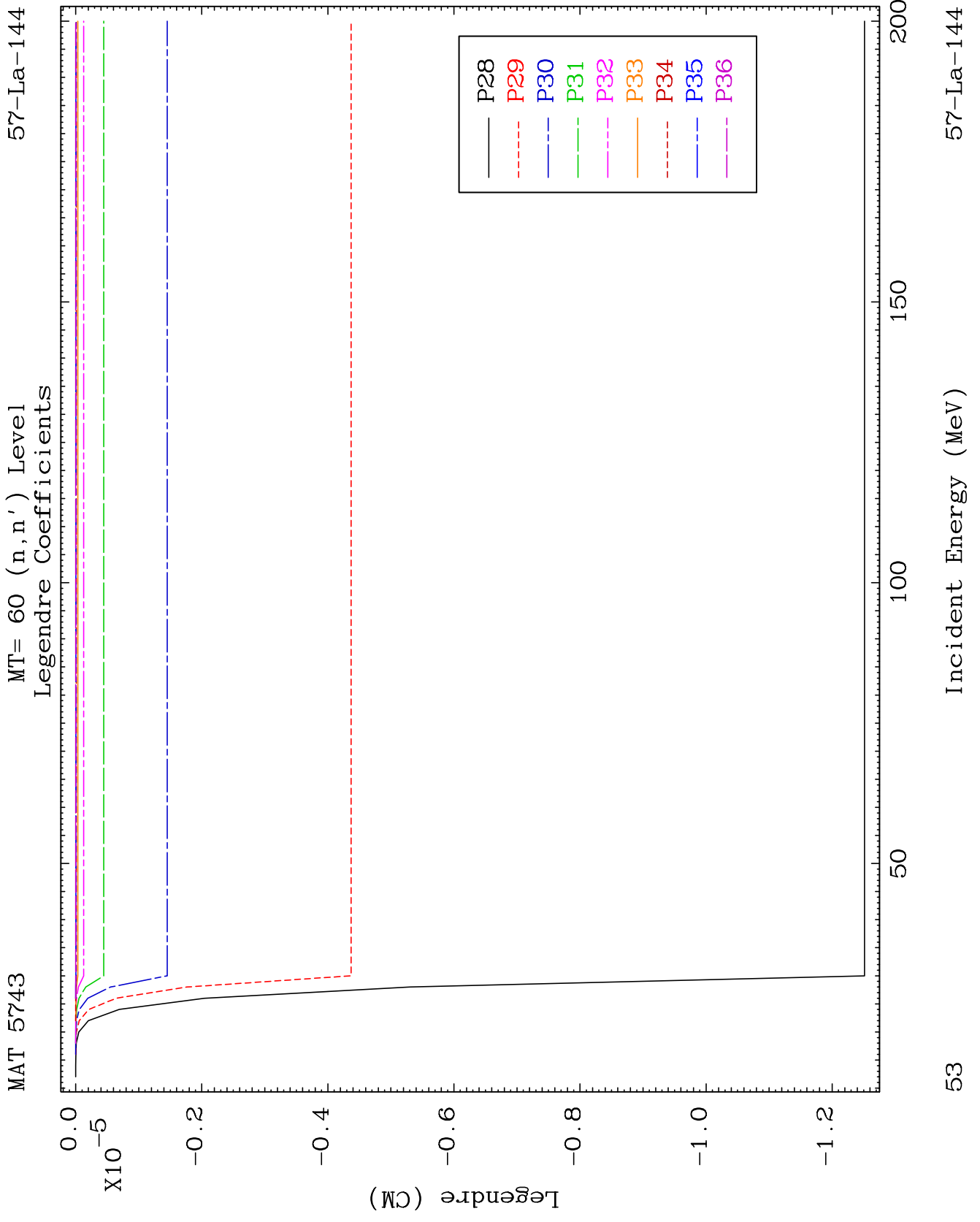


51

Incident Energy (MeV)

57-La-144



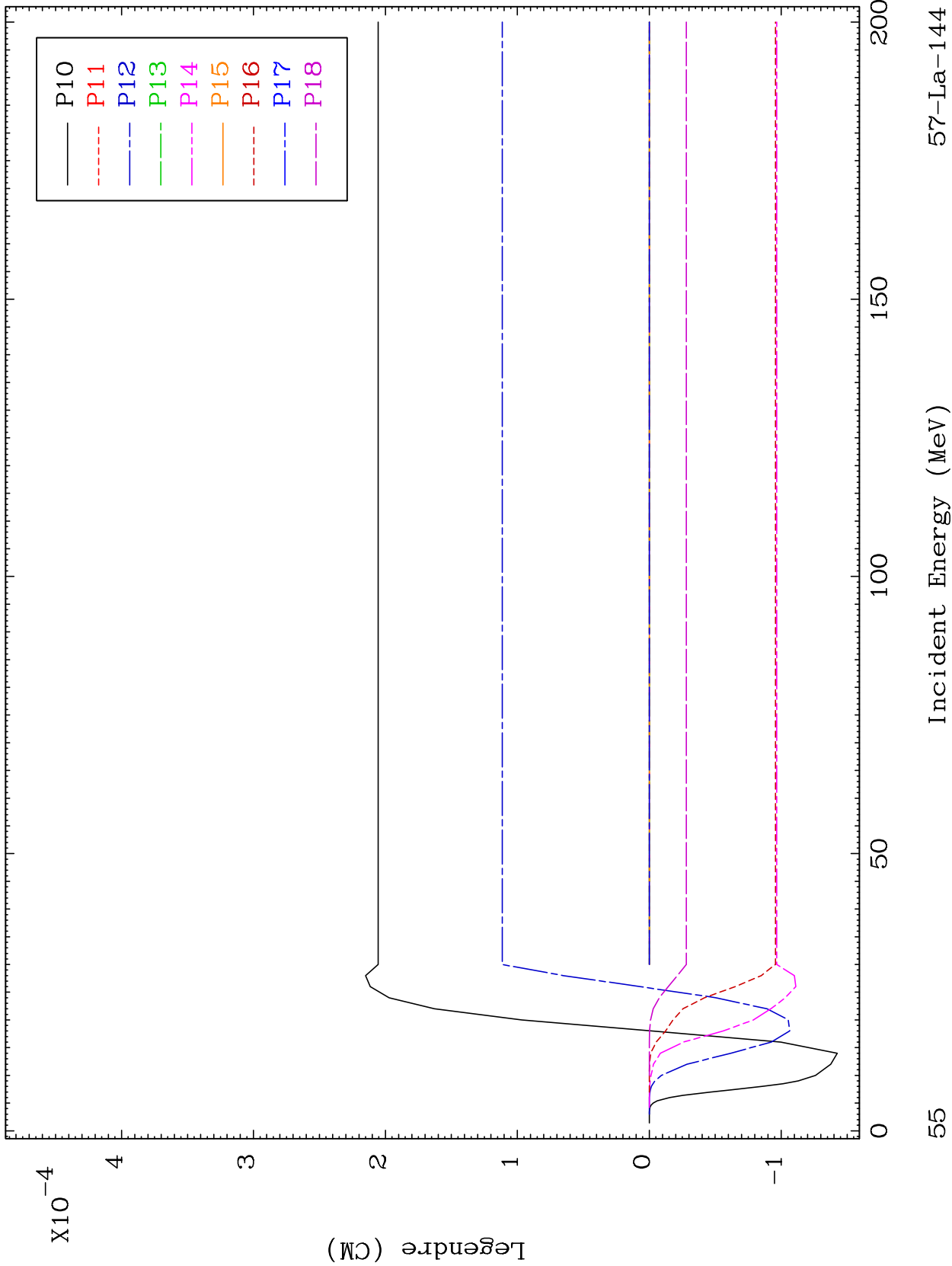




MAT 5743

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

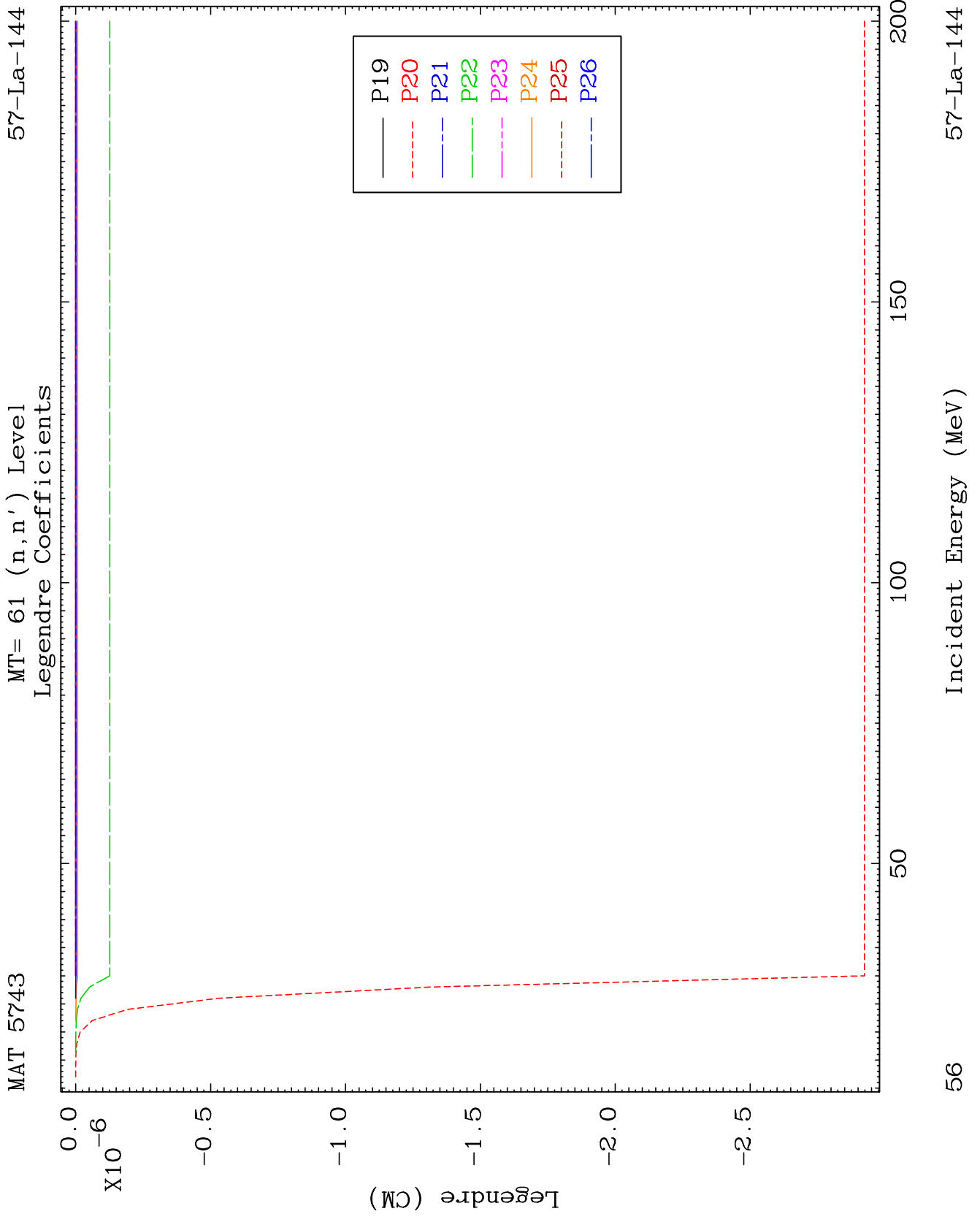
57-La-144



57-La-144

Incident Energy (MeV)

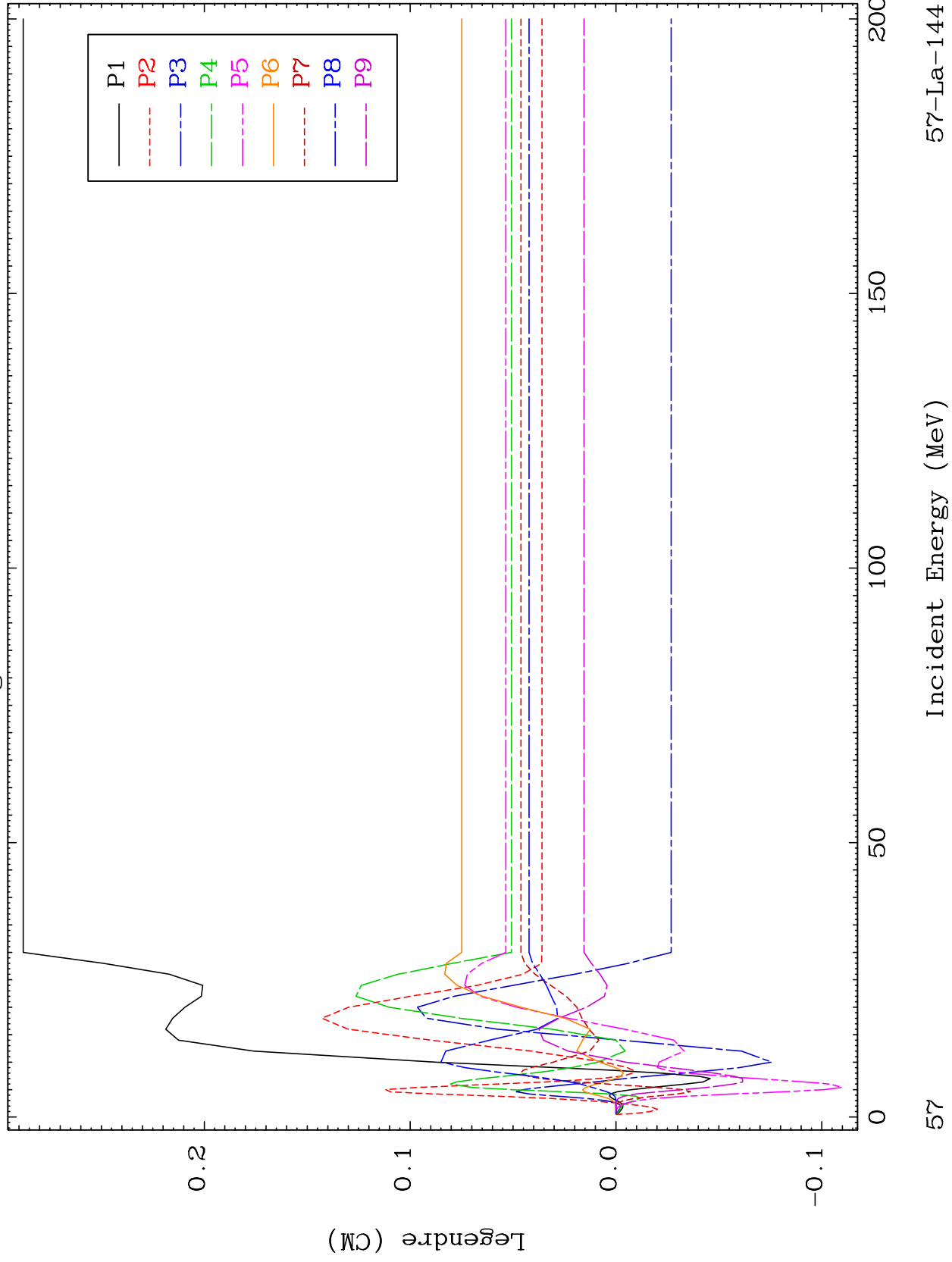
55



MAT 5743

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

57-La-144



57-La-144

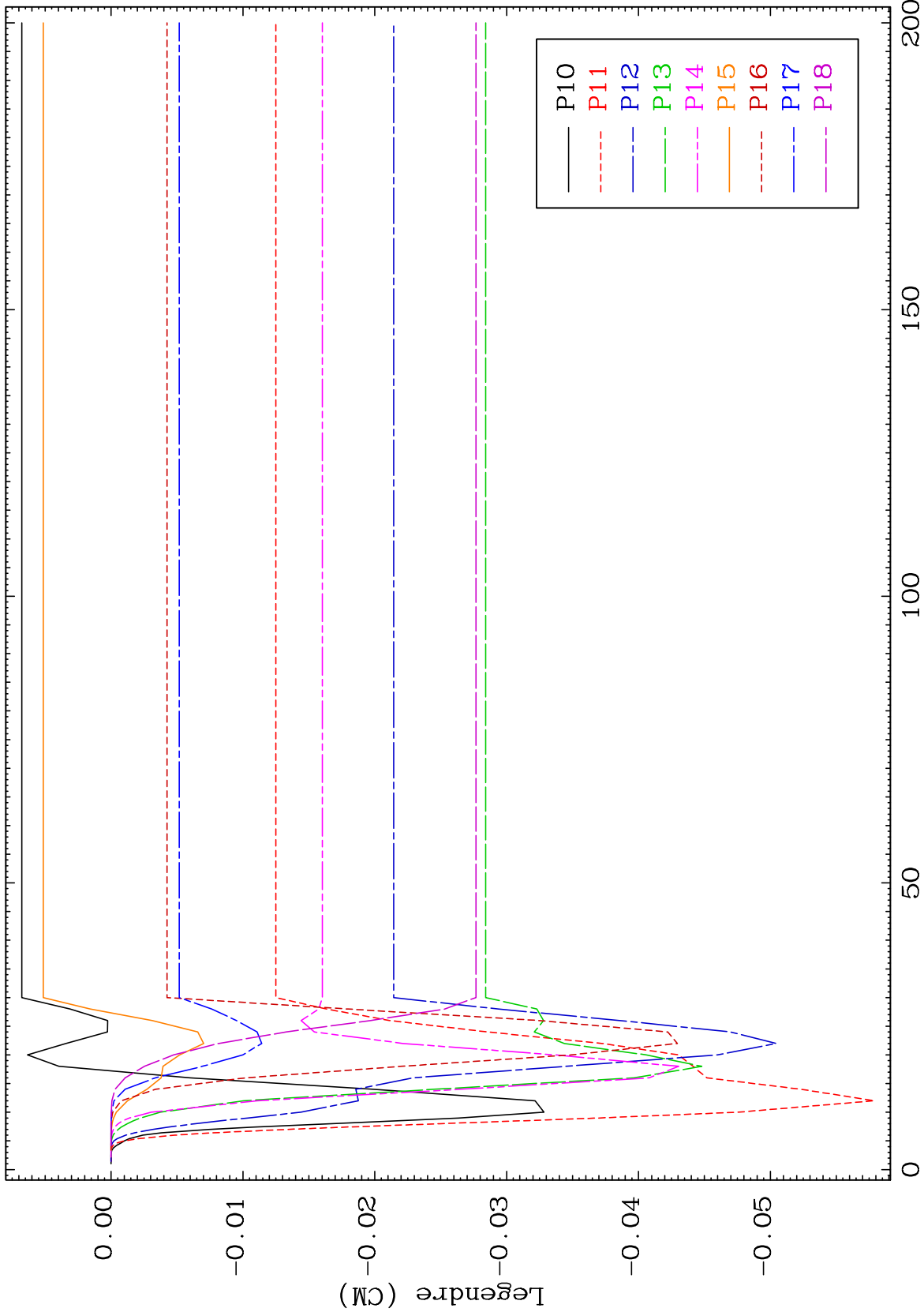
Incident Energy (MeV)

57

MAT 5743

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

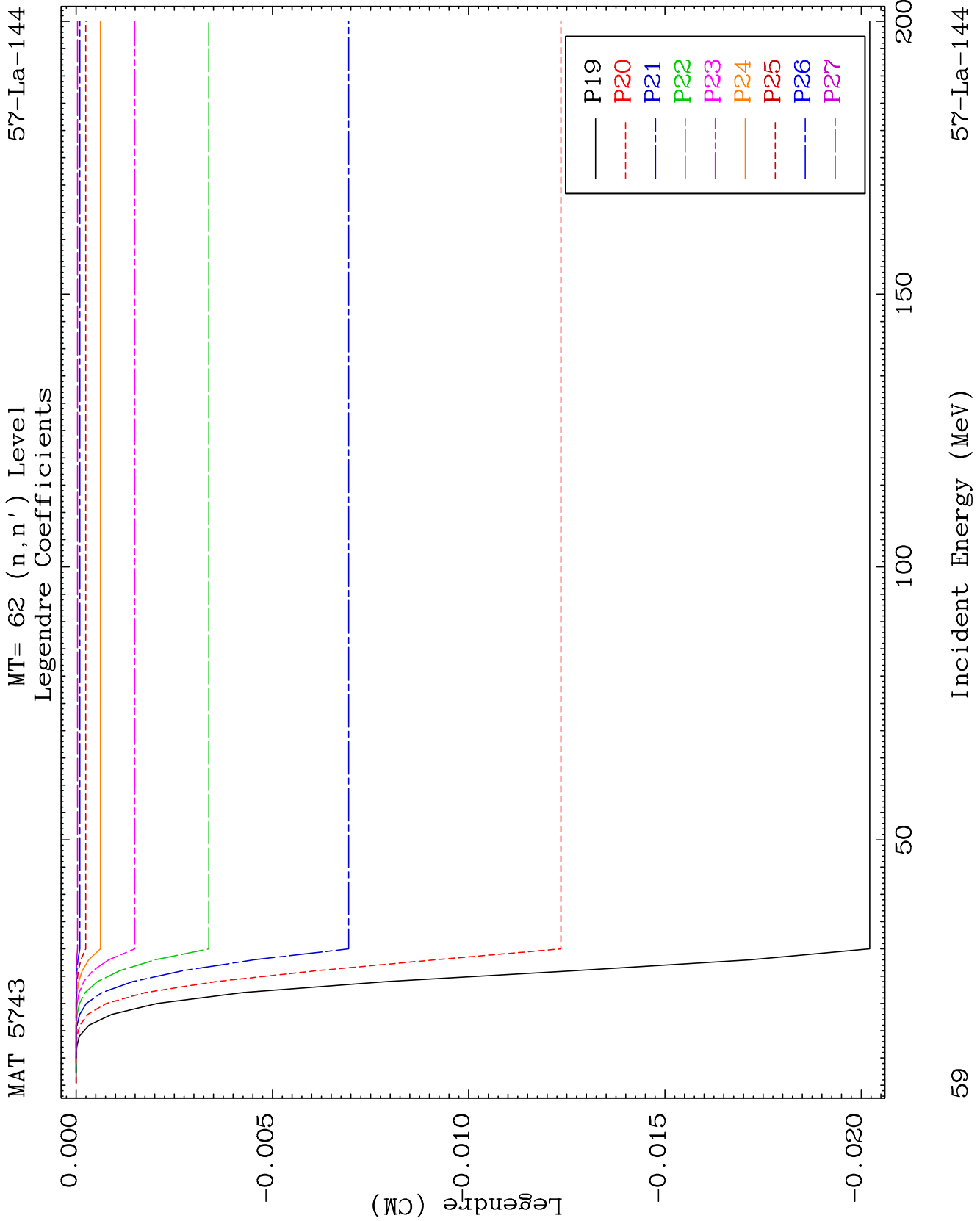
57-La-144



58

Incident Energy (MeV)

57-La-144

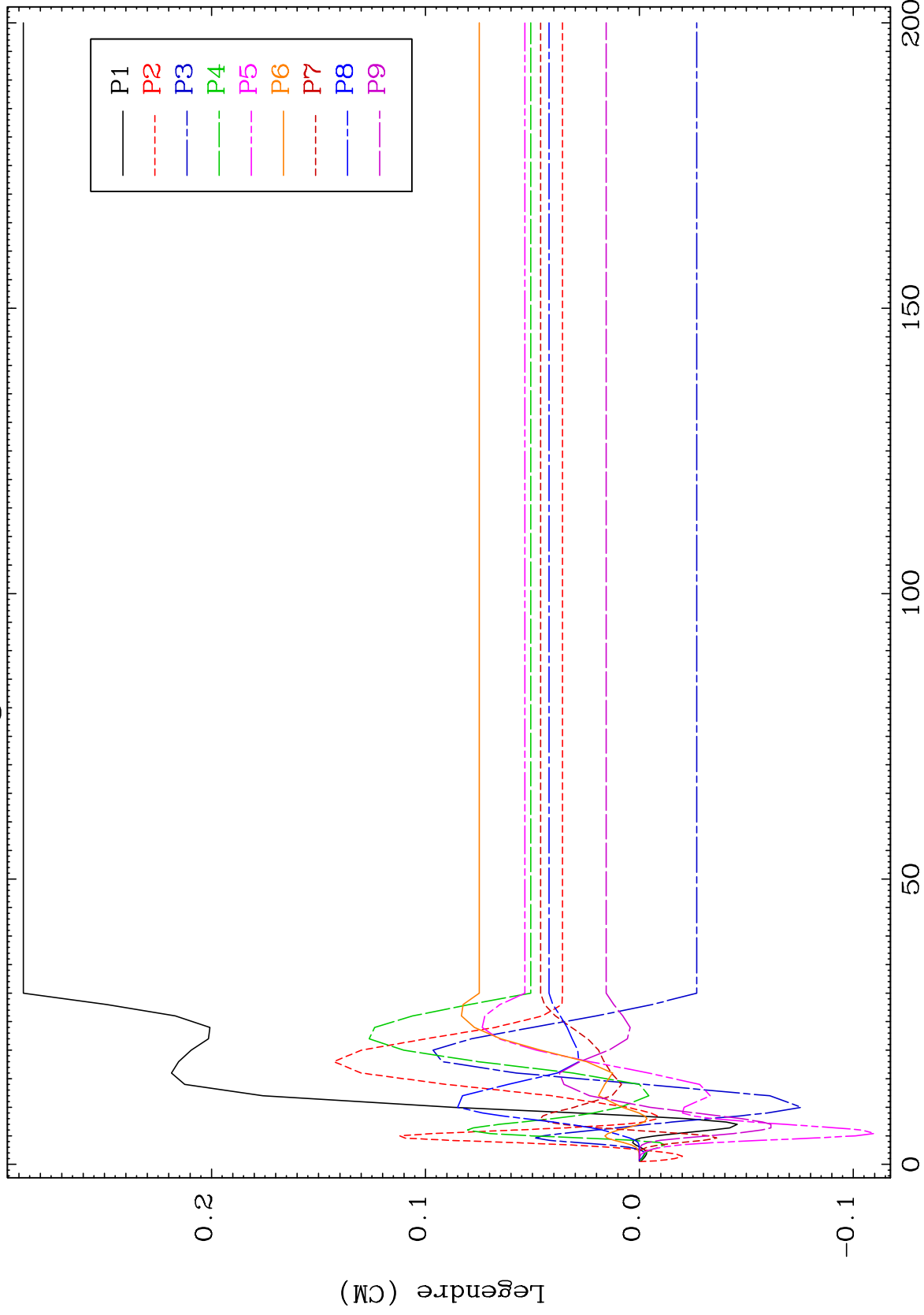




MAT 5743

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

57-La-144



57-La-144

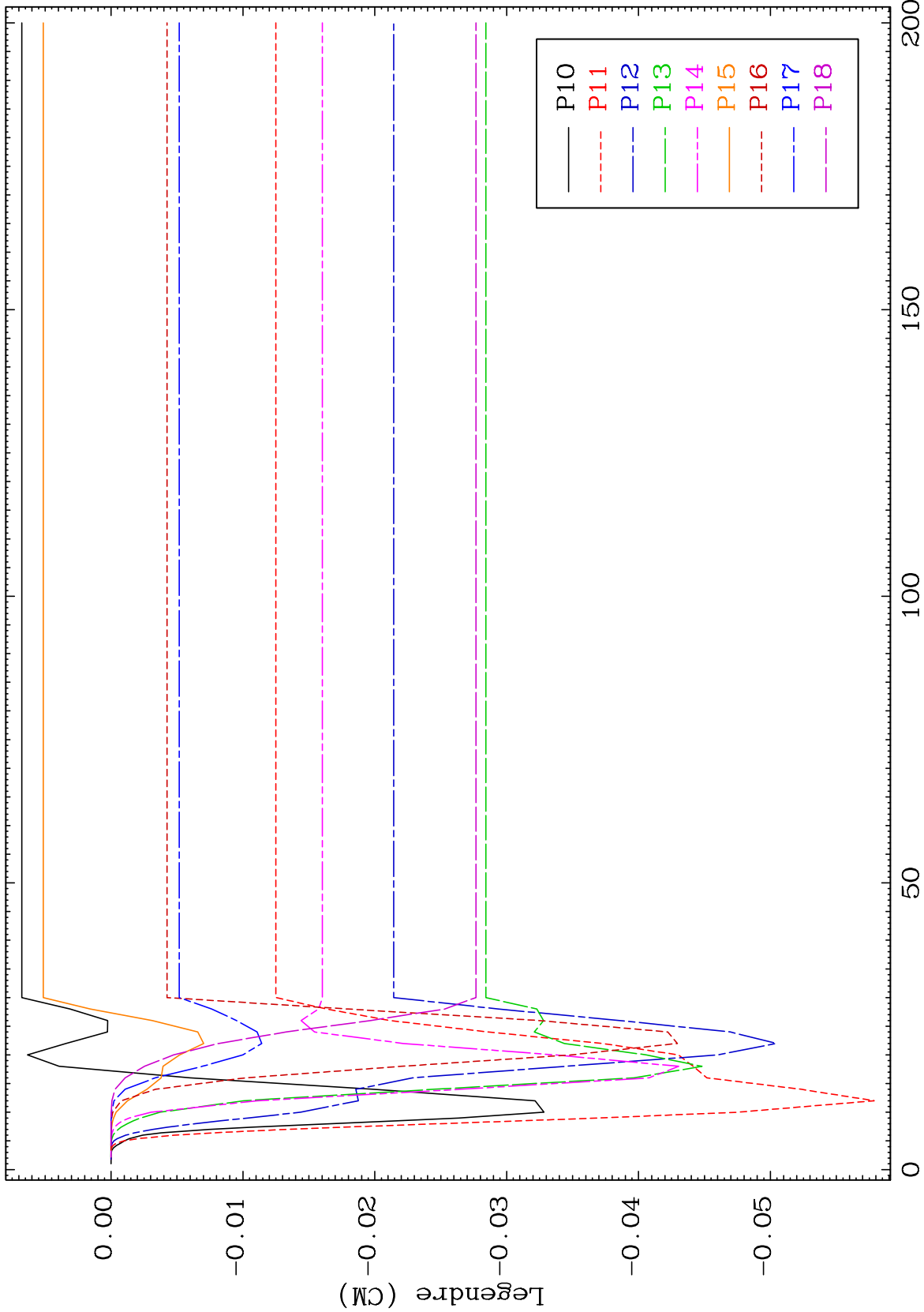
Incident Energy (MeV)

61

MAT 5743

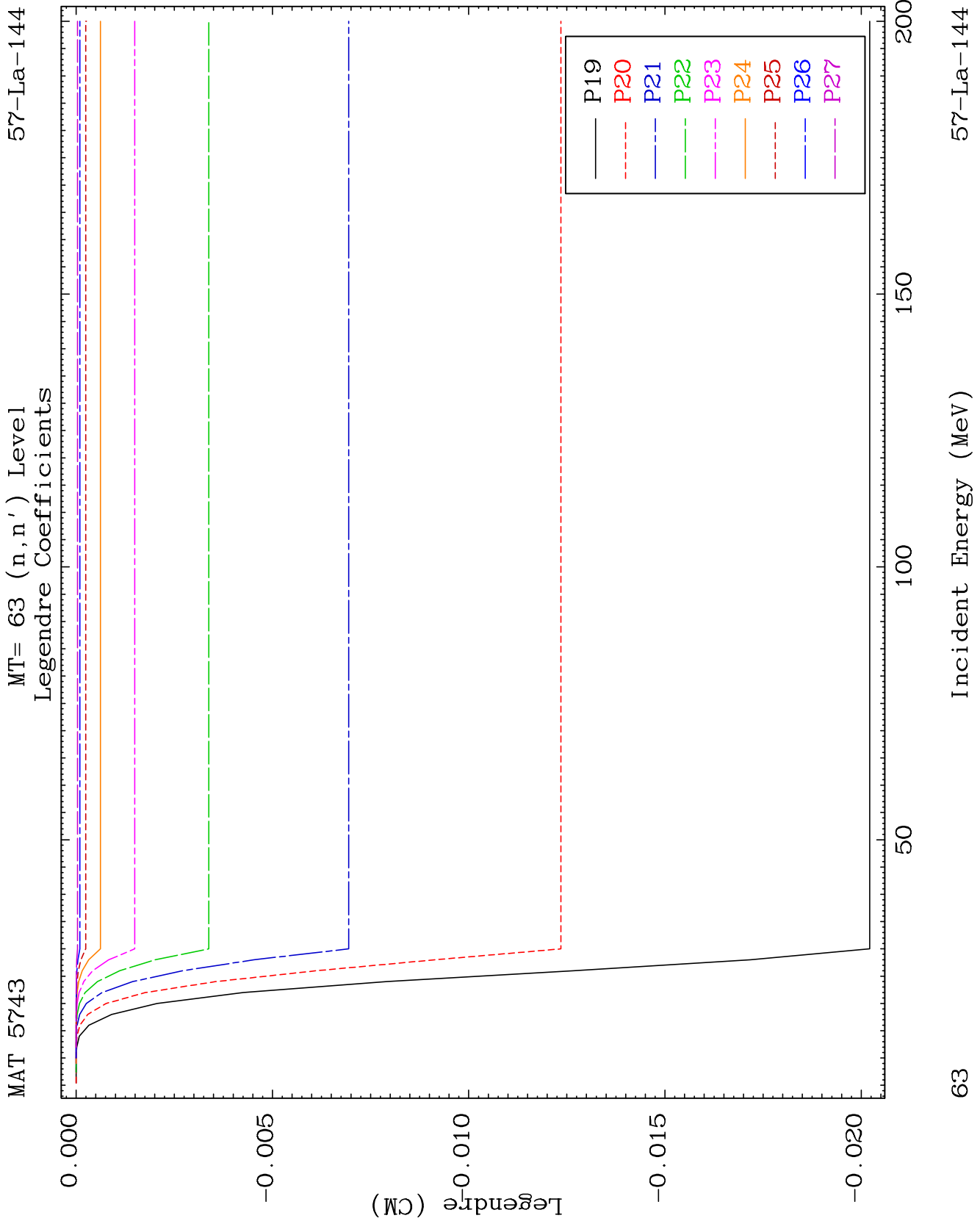
MT= 63 (n,n') Level  
Legendre Coefficients

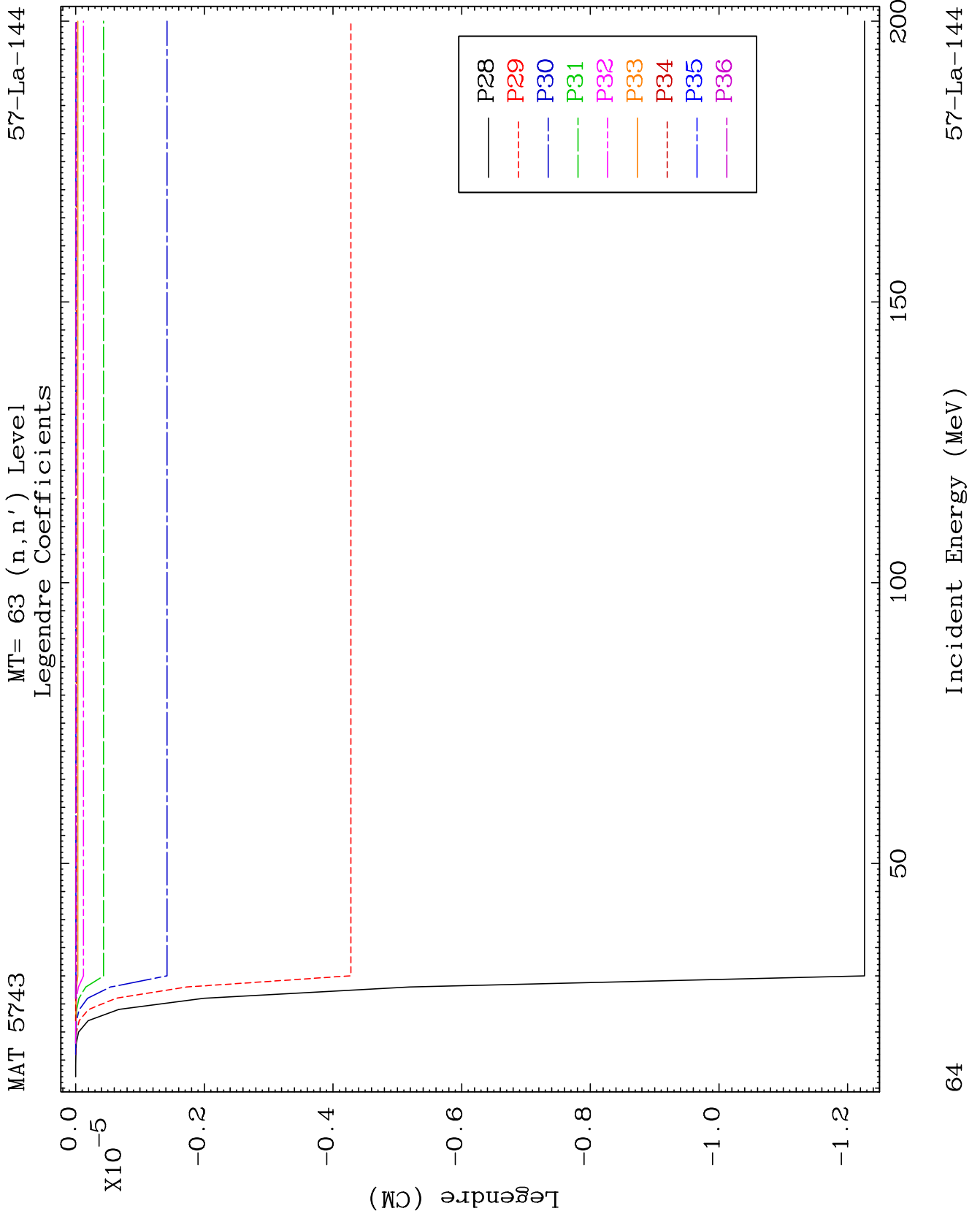
57-La-144



62

57-La-144

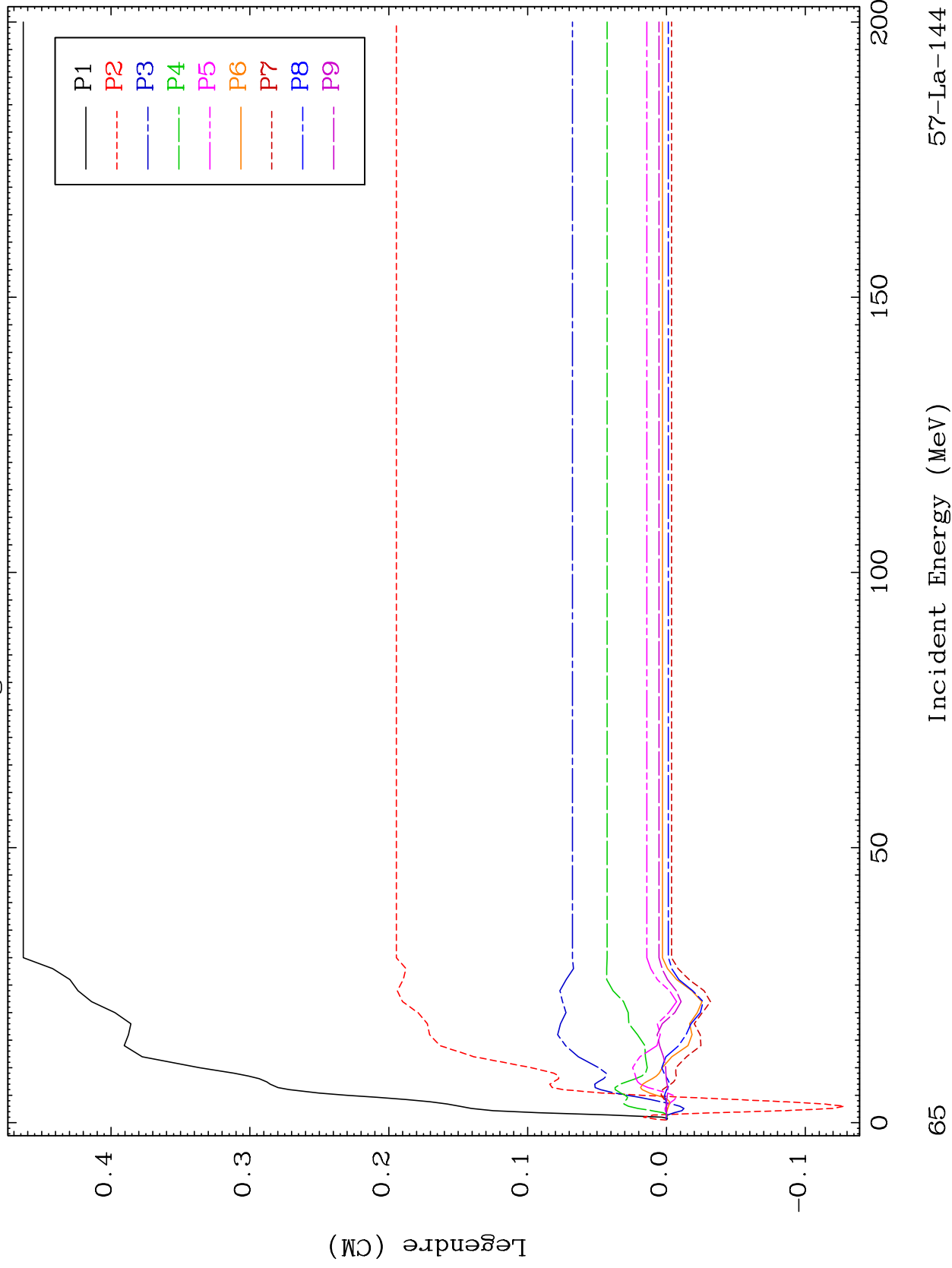




MAT 5743

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

57-La-144



57-La-144

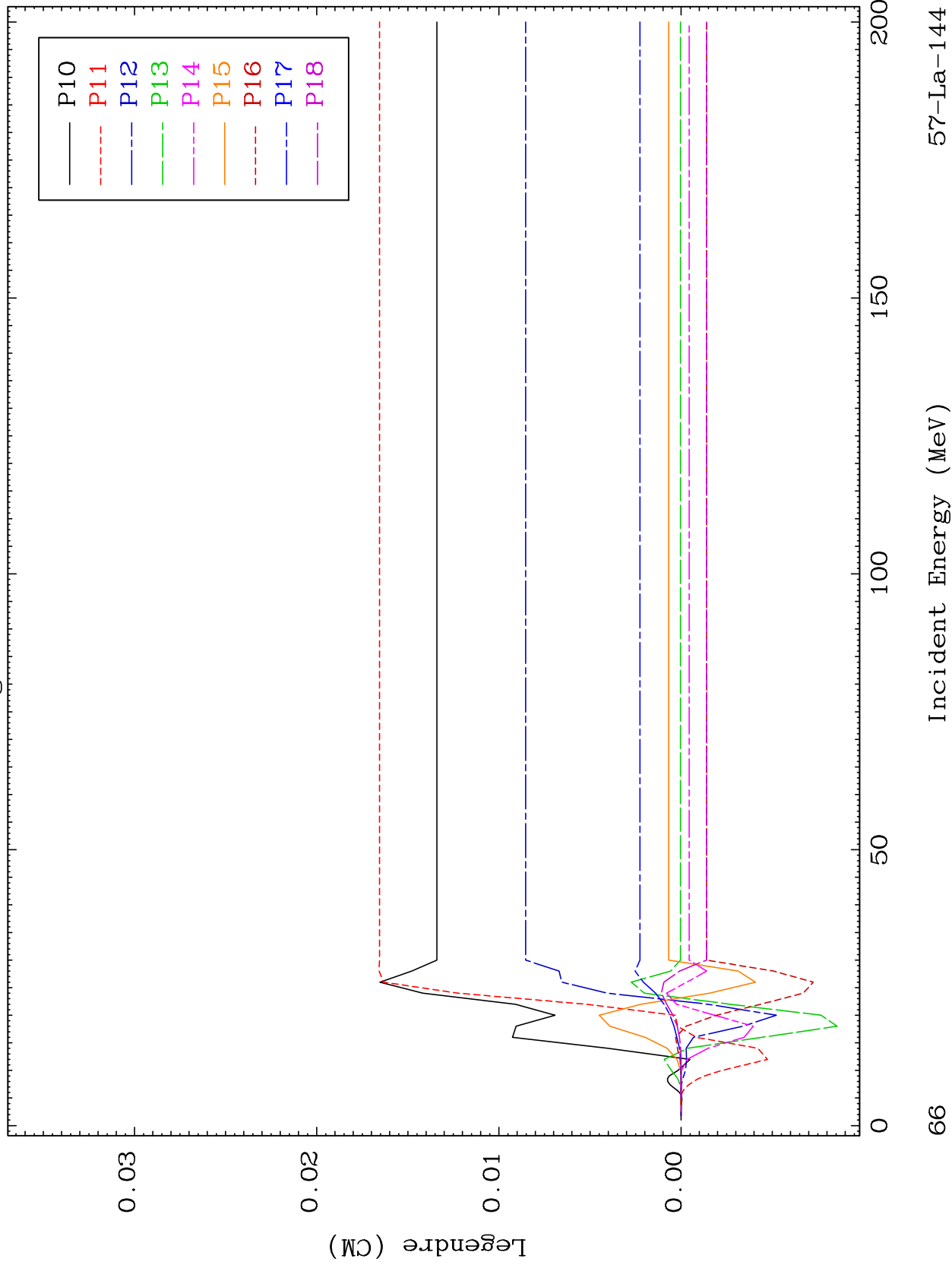
Incident Energy (MeV)

65

MAT 5743

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

57-La-144



57-La-144

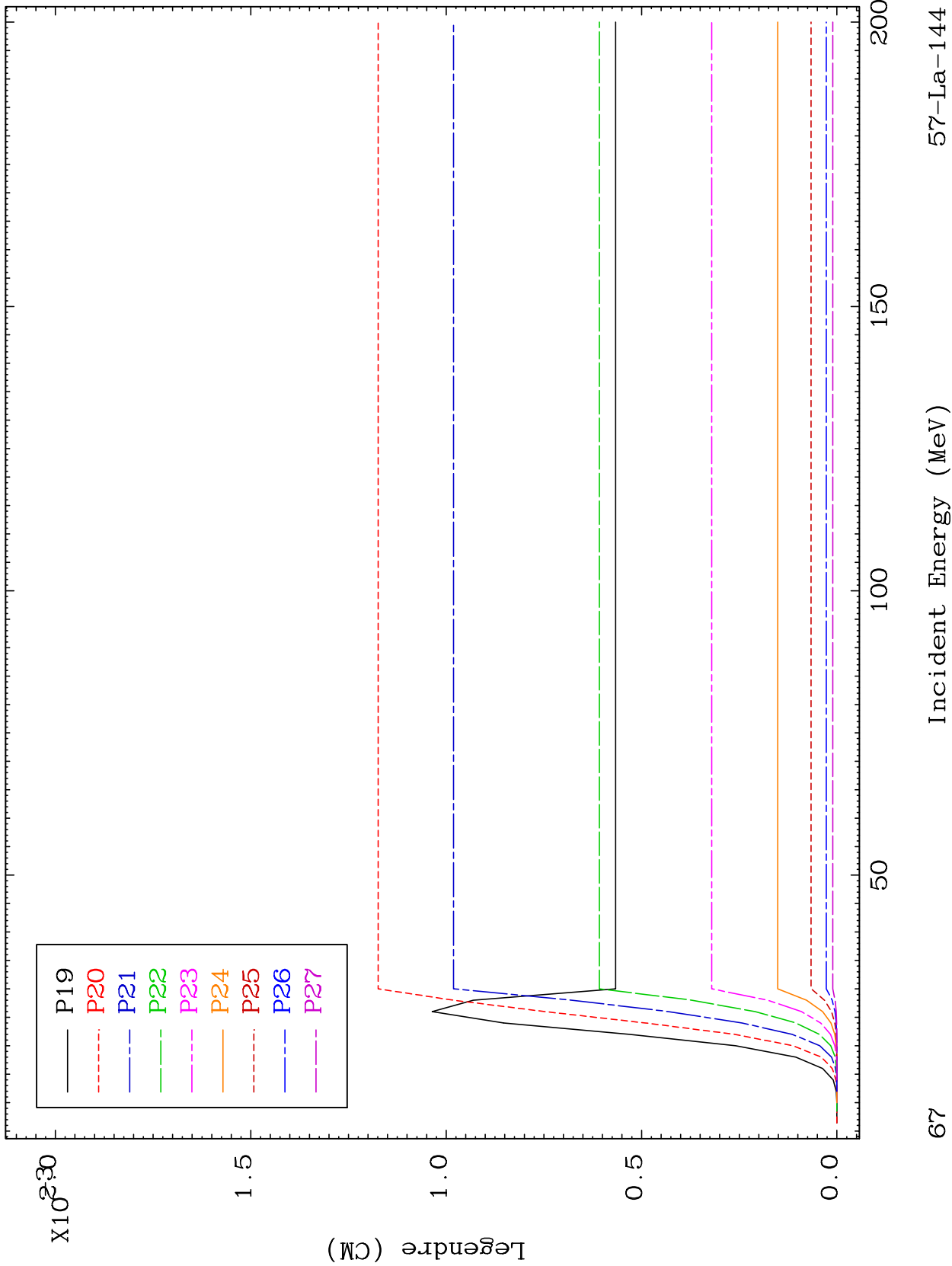
Incident Energy (MeV)

66

MAT 5743

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

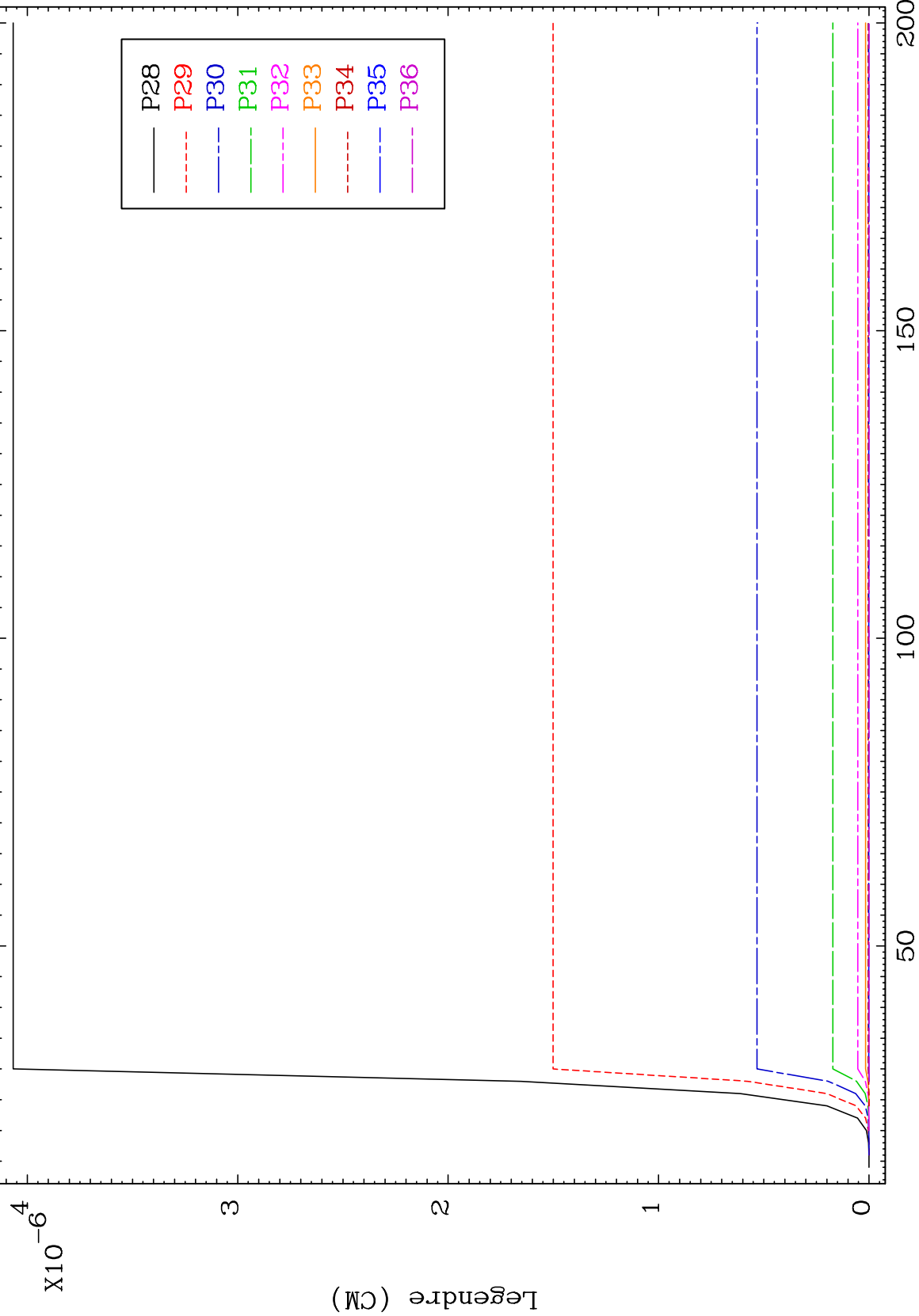
57-La-144



MAT 5743

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

57-La-144



68

Incident Energy (MeV)

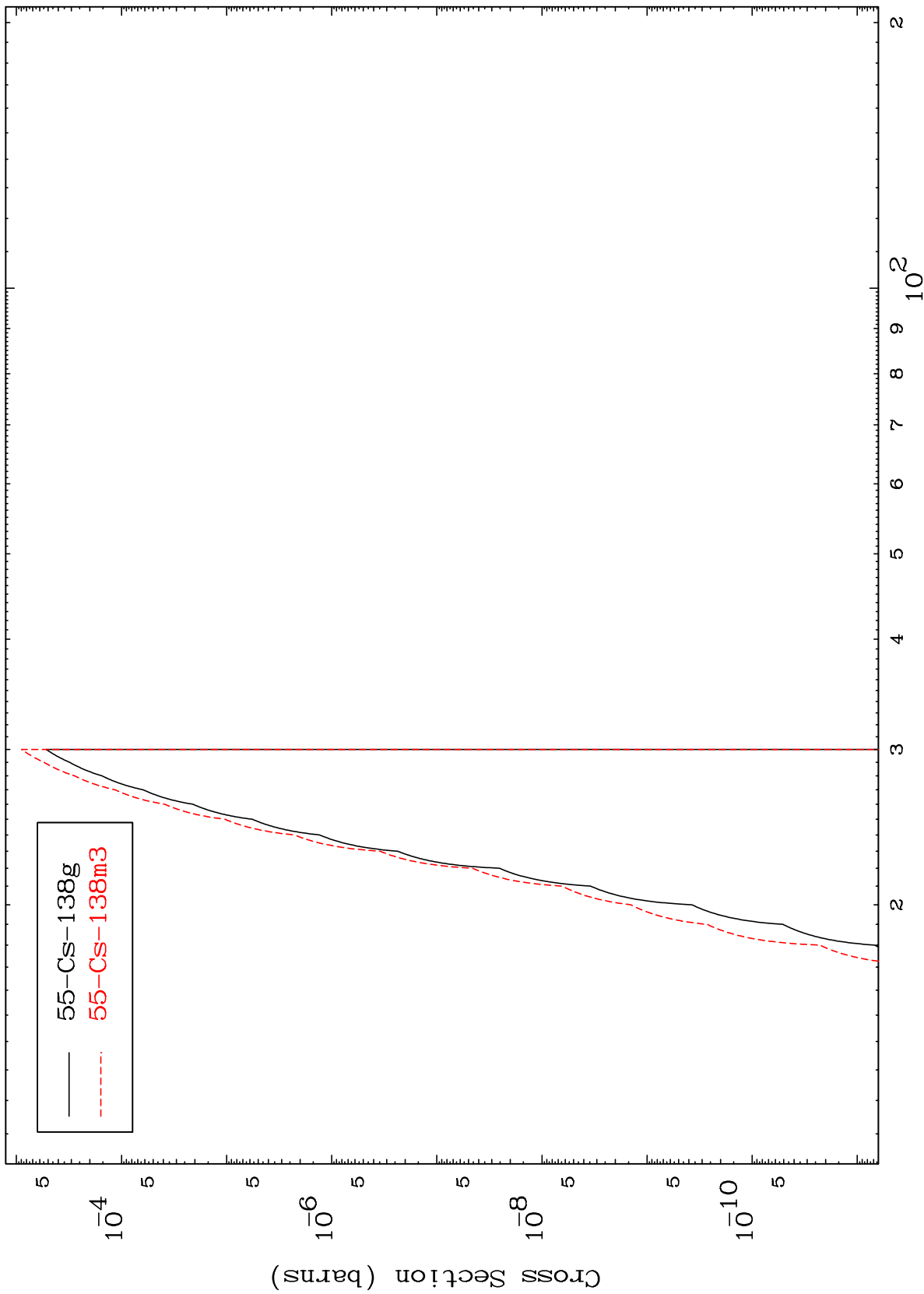
57-La-144

MAT 5743

(n,3n)  $\alpha$

57-La-144

Radionuclide Production Cross Section



69

Incident Energy (MeV)

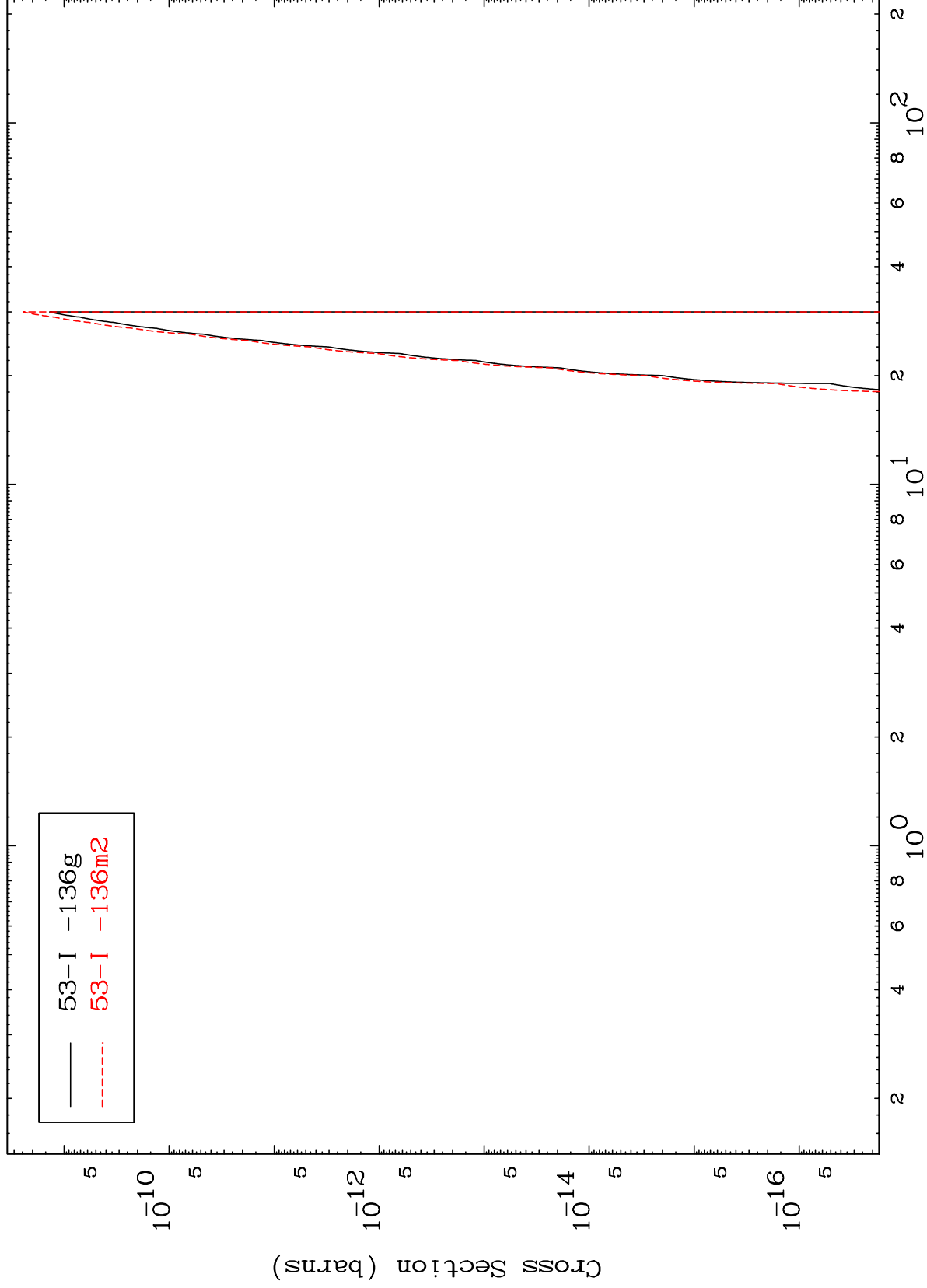
57-La-144

MAT 5743

(n,n') 2 $\alpha$

57-La-144

Radionuclide Production Cross Section



70

Incident Energy (MeV)

57-La-144