

Program EVALPLOT
(Version 2018-1)

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

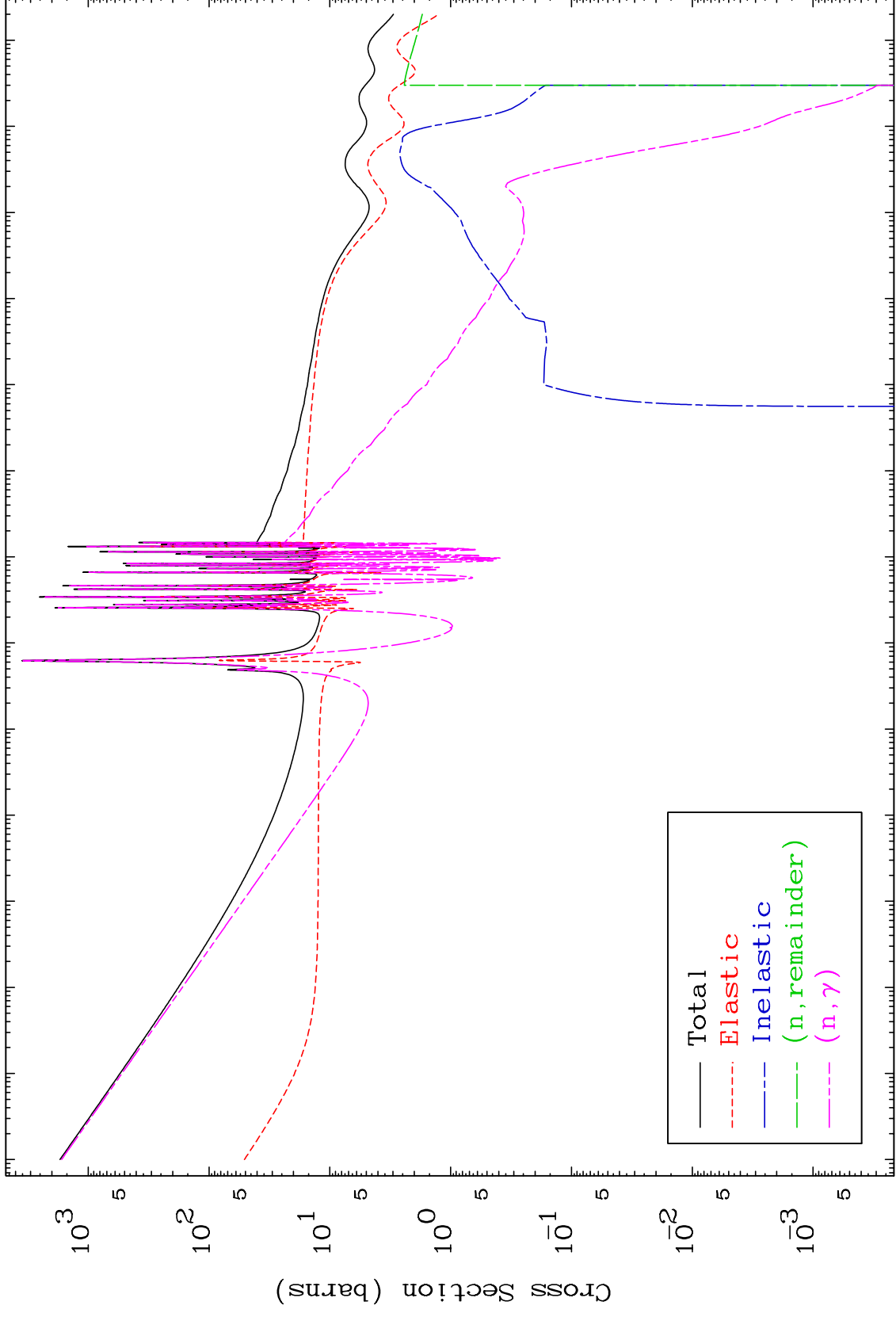
Press Mouse Button to Start

MAT 8310

Major

293 Kelvin Cross Sections

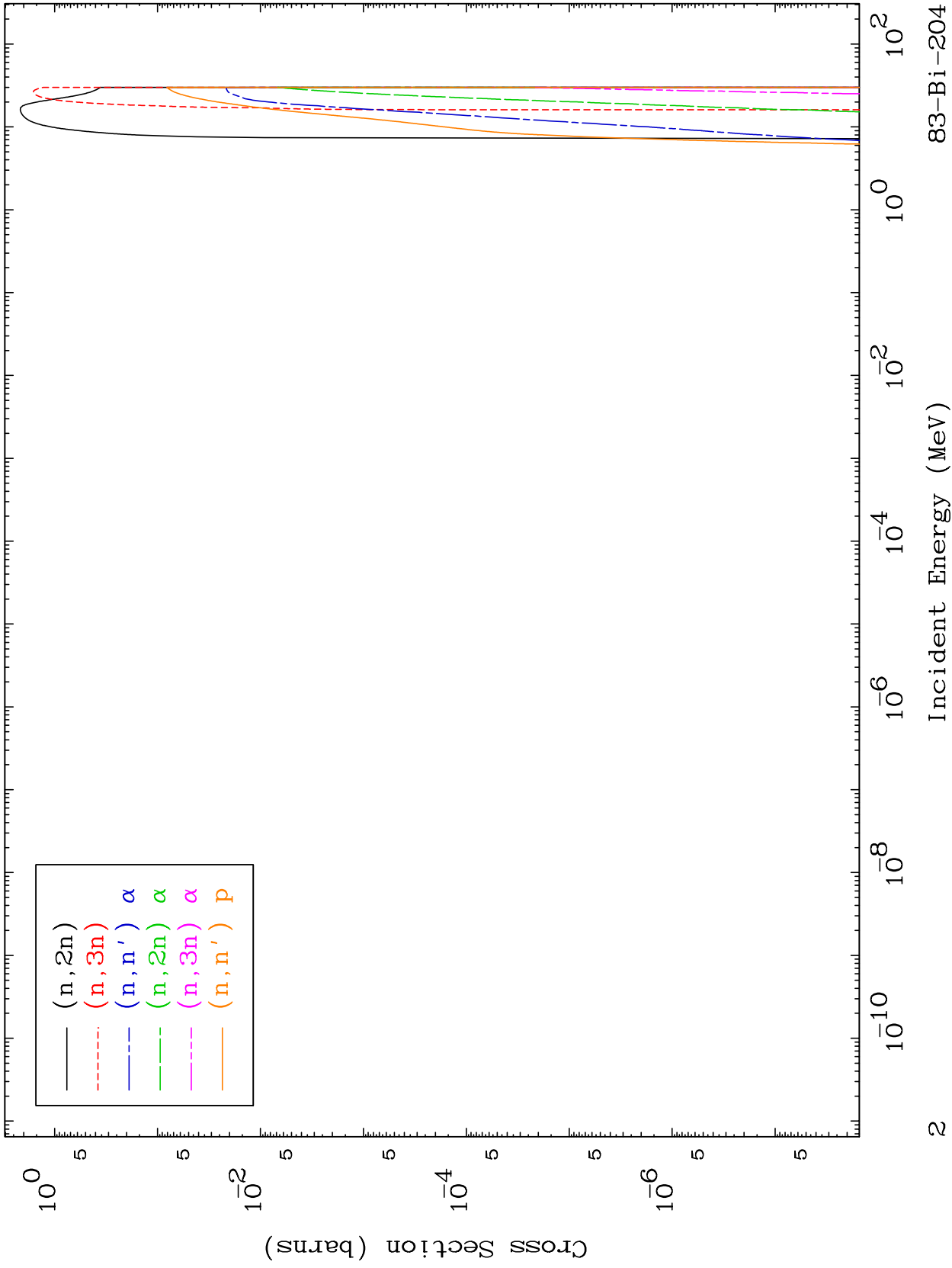
83-Bi-204



MAT 8310

Neutron Production
293 Kelvin Cross Sections

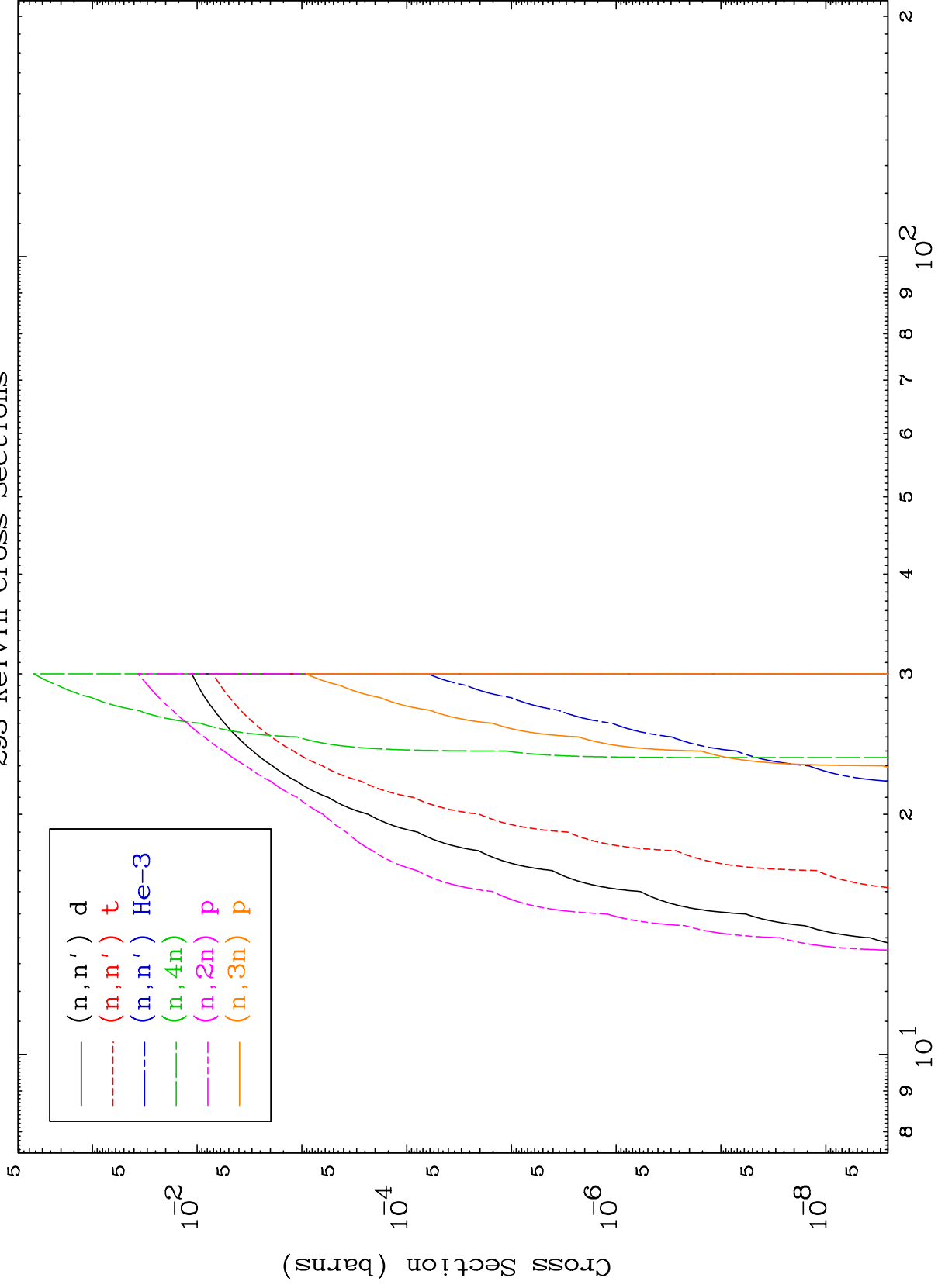
83-Bi-204



MAT 8310

Neutron Production
293 Kelvin Cross Sections

83-Bi-204



3

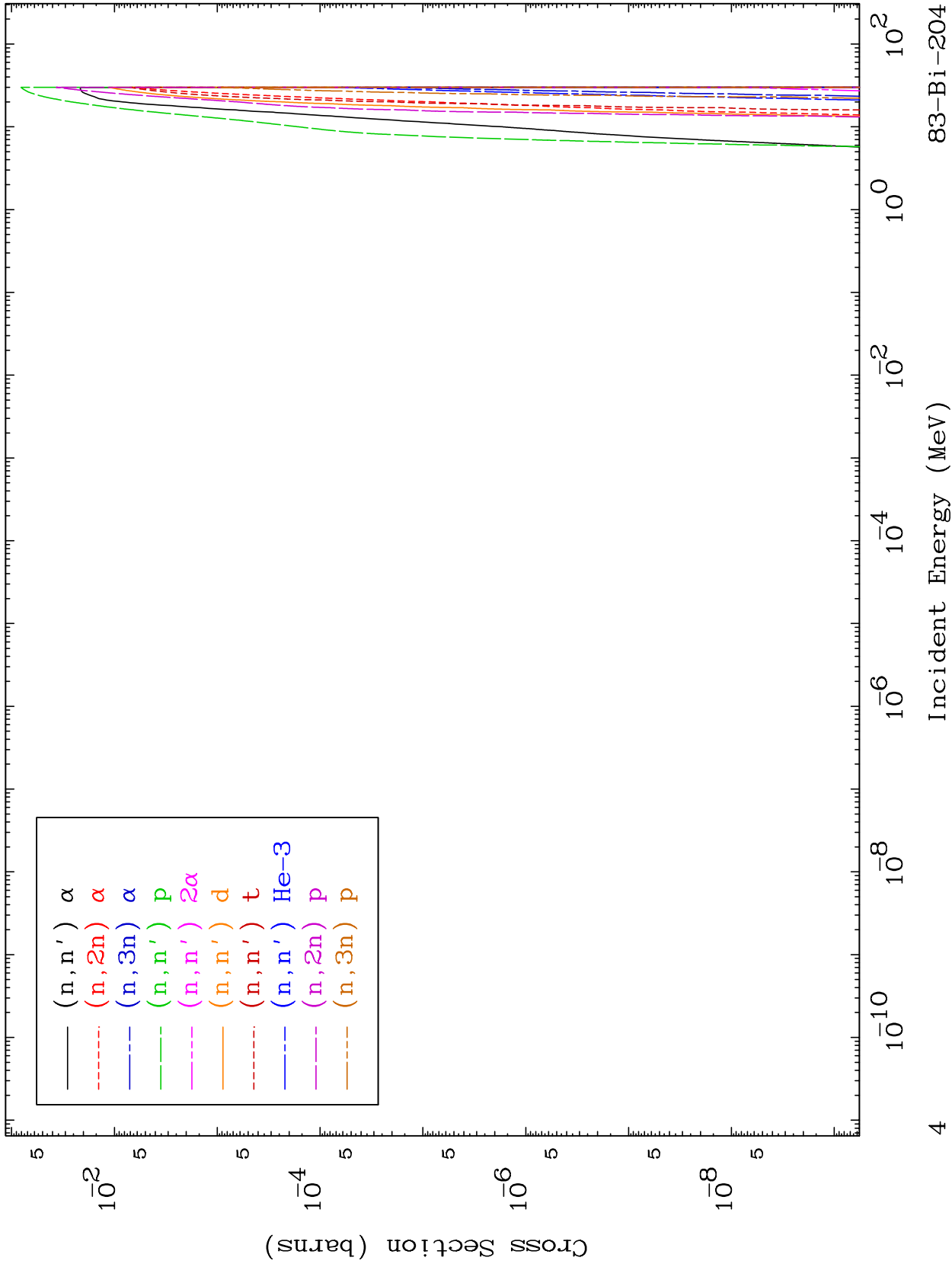
Incident Energy (MeV)

83-Bi-204

MAT 8310

Charged Particle
293 Kelvin Cross Sections

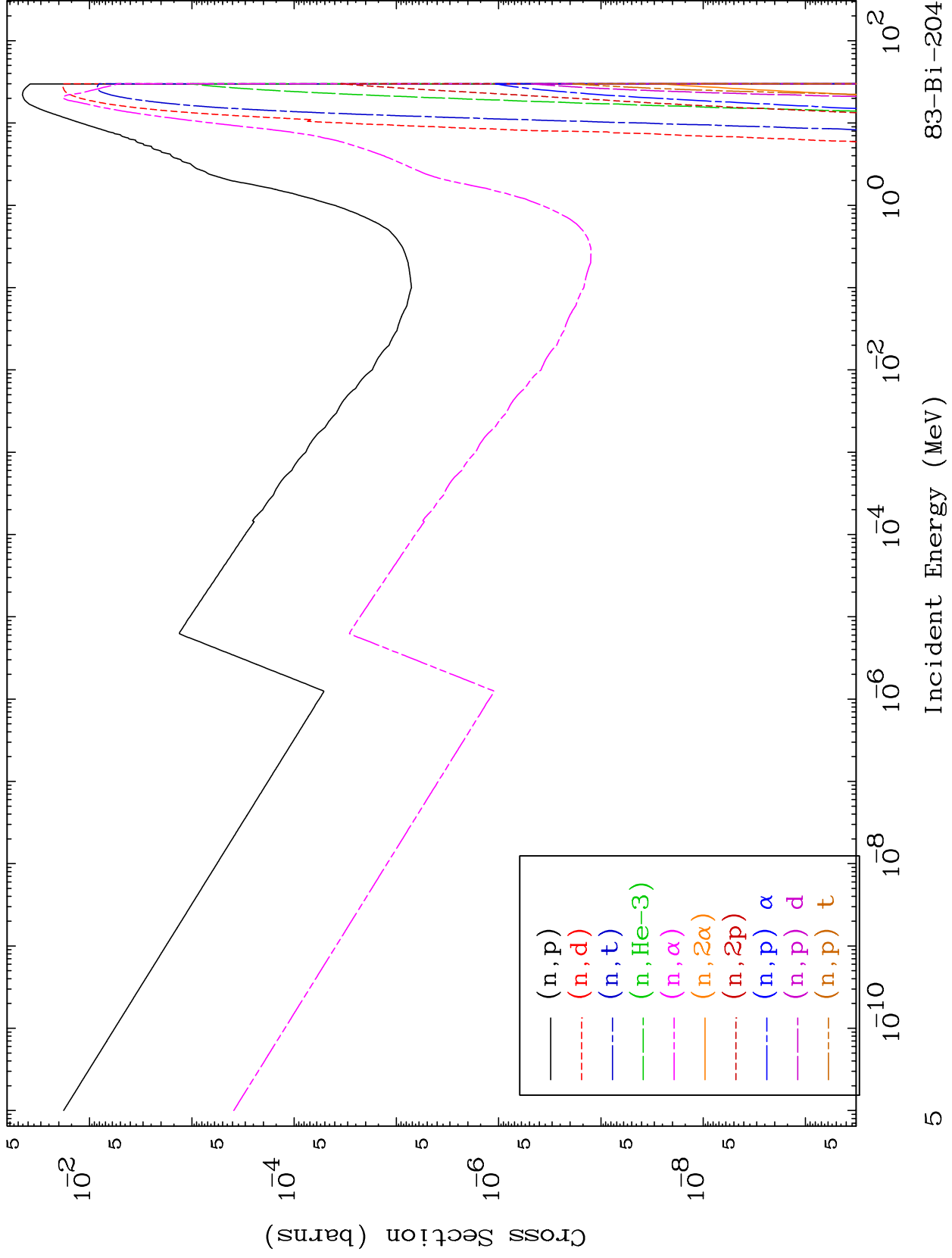
83-Bi-204



MAT 8310

Charged Particle
293 Kelvin Cross Sections

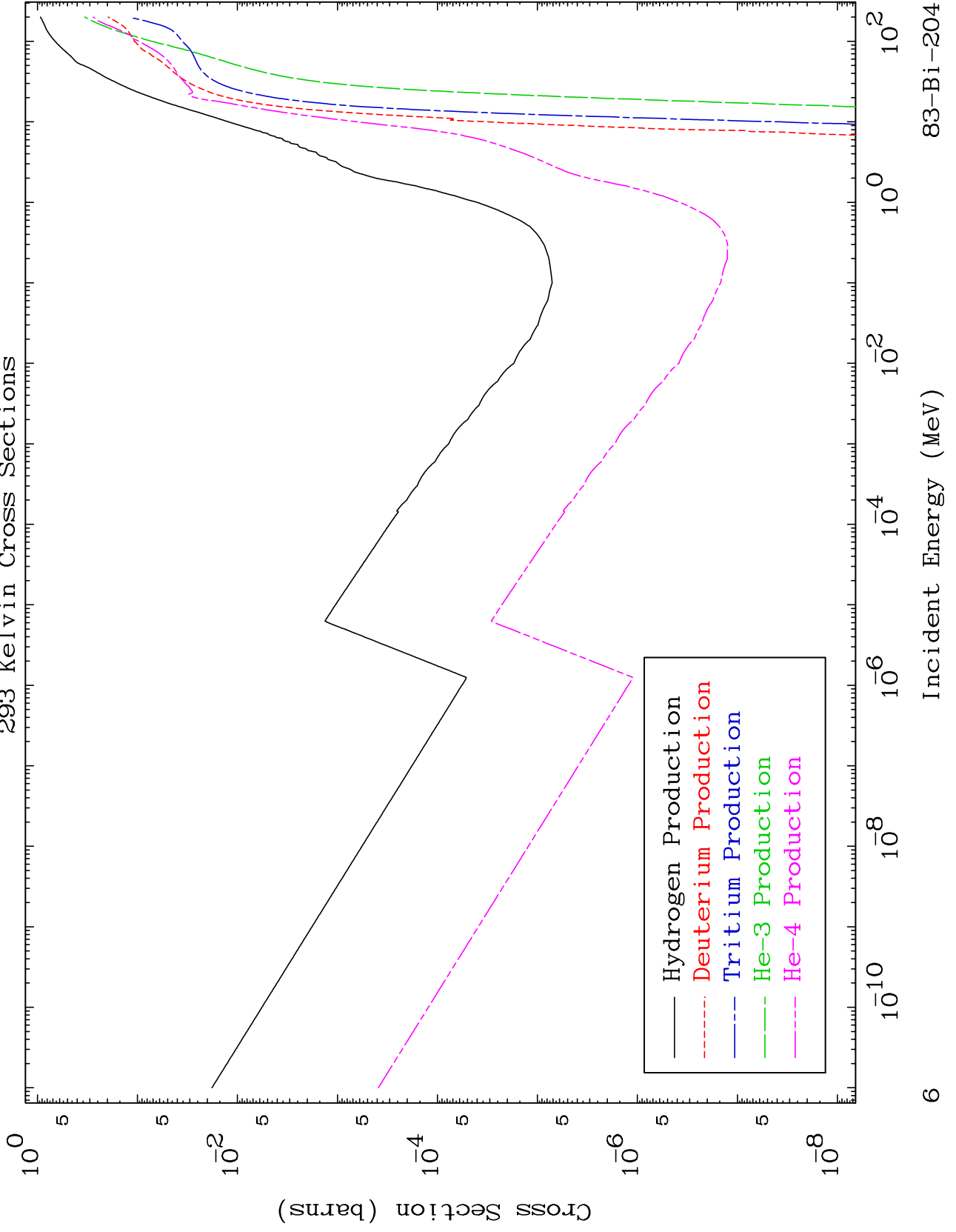
83-Bi-204



MAT 8310

Particle Production
293 Kelvin Cross Sections

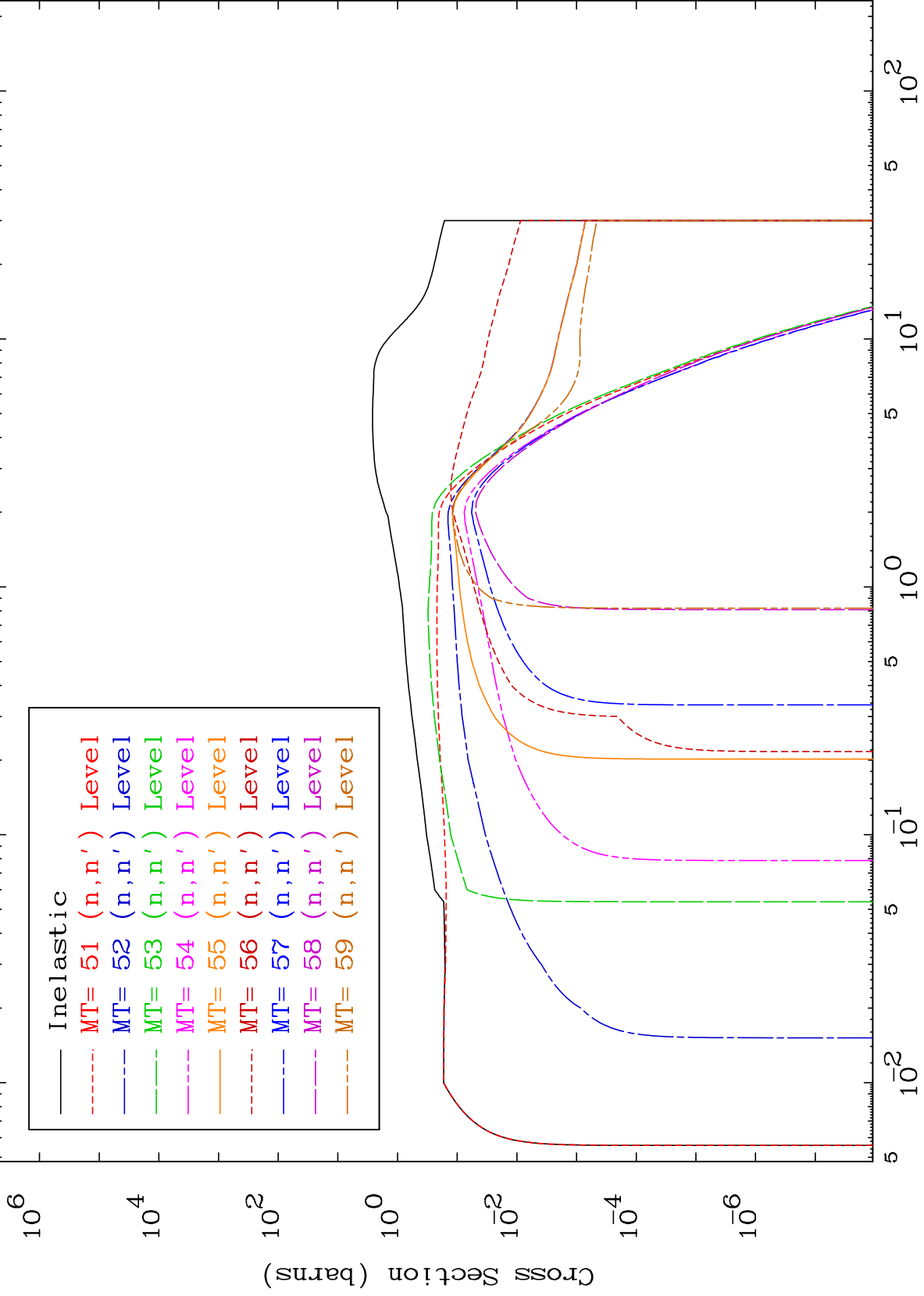
83-Bi-204



MAT 8310

(n,n') Level
293 Kelvin Cross Sections

83-Bi-204



7

Incident Energy (MeV)

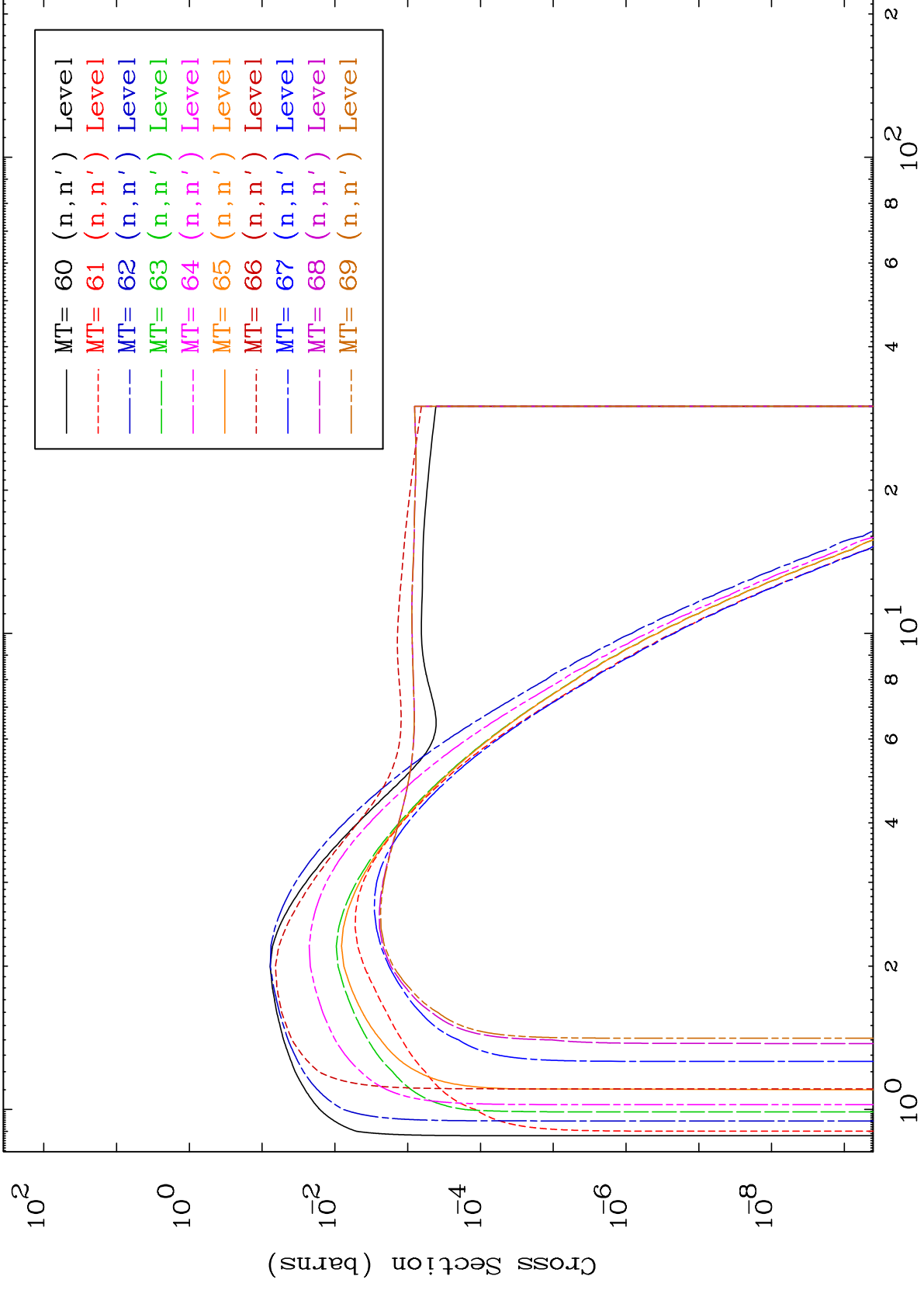
83-Bi-204

MAT 8310

(n,n') Level

83-Bi-204

293 Kelvin Cross Sections

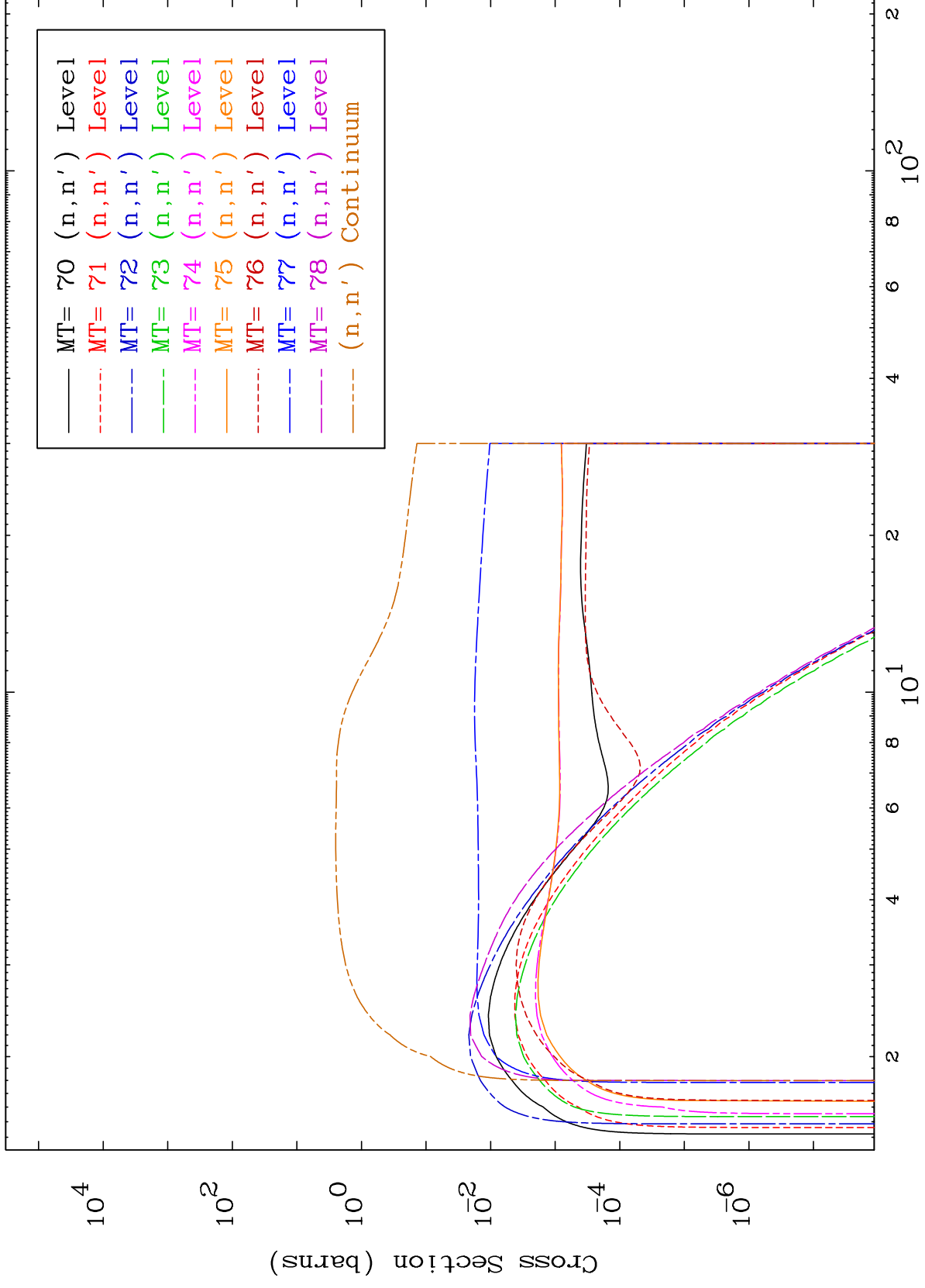


Incident Energy (MeV)

83-Bi-204

8

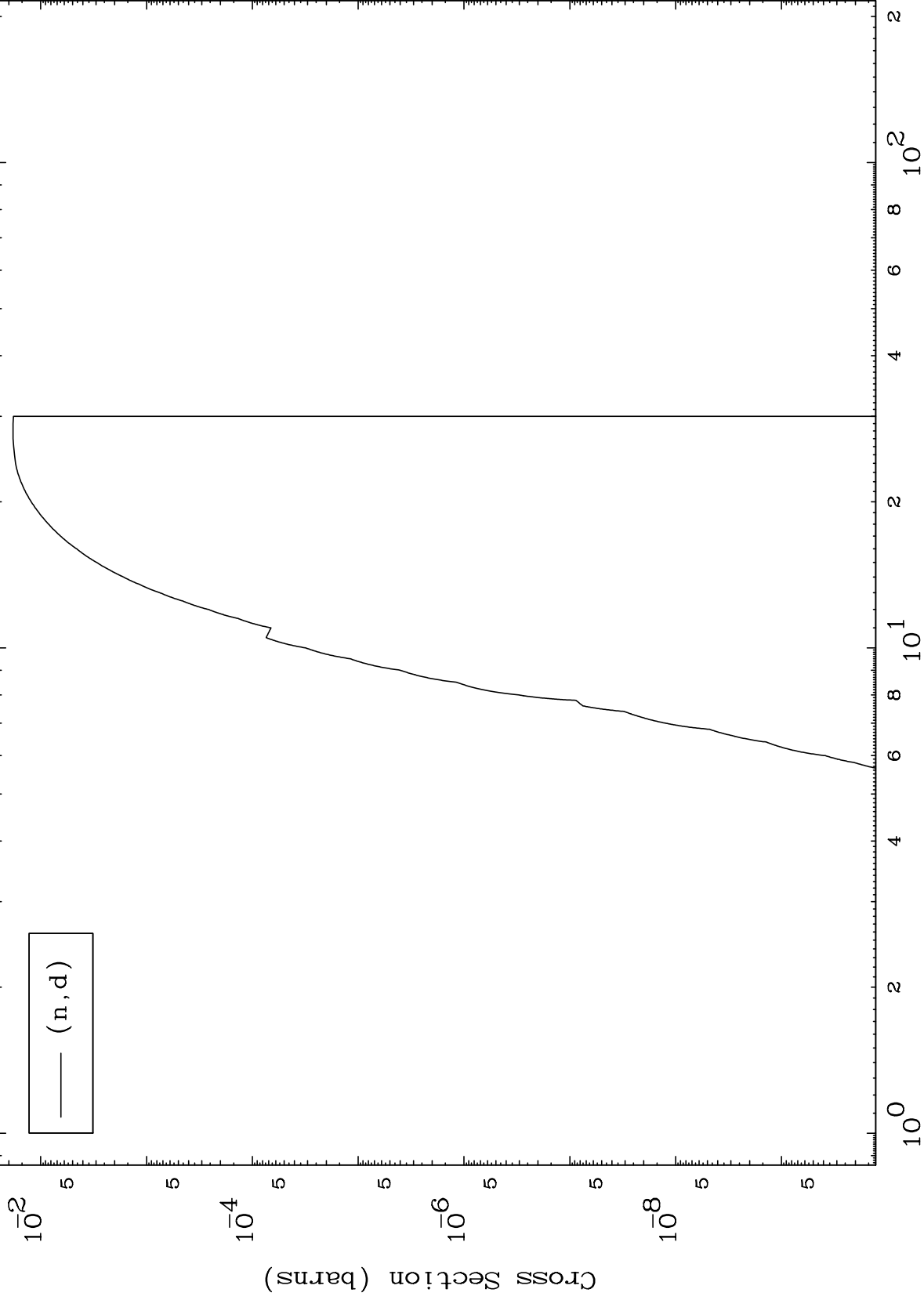
293 Kelvin Cross Sections



MAT 8310

(n,d) Levels
293 Kelvin Cross Sections

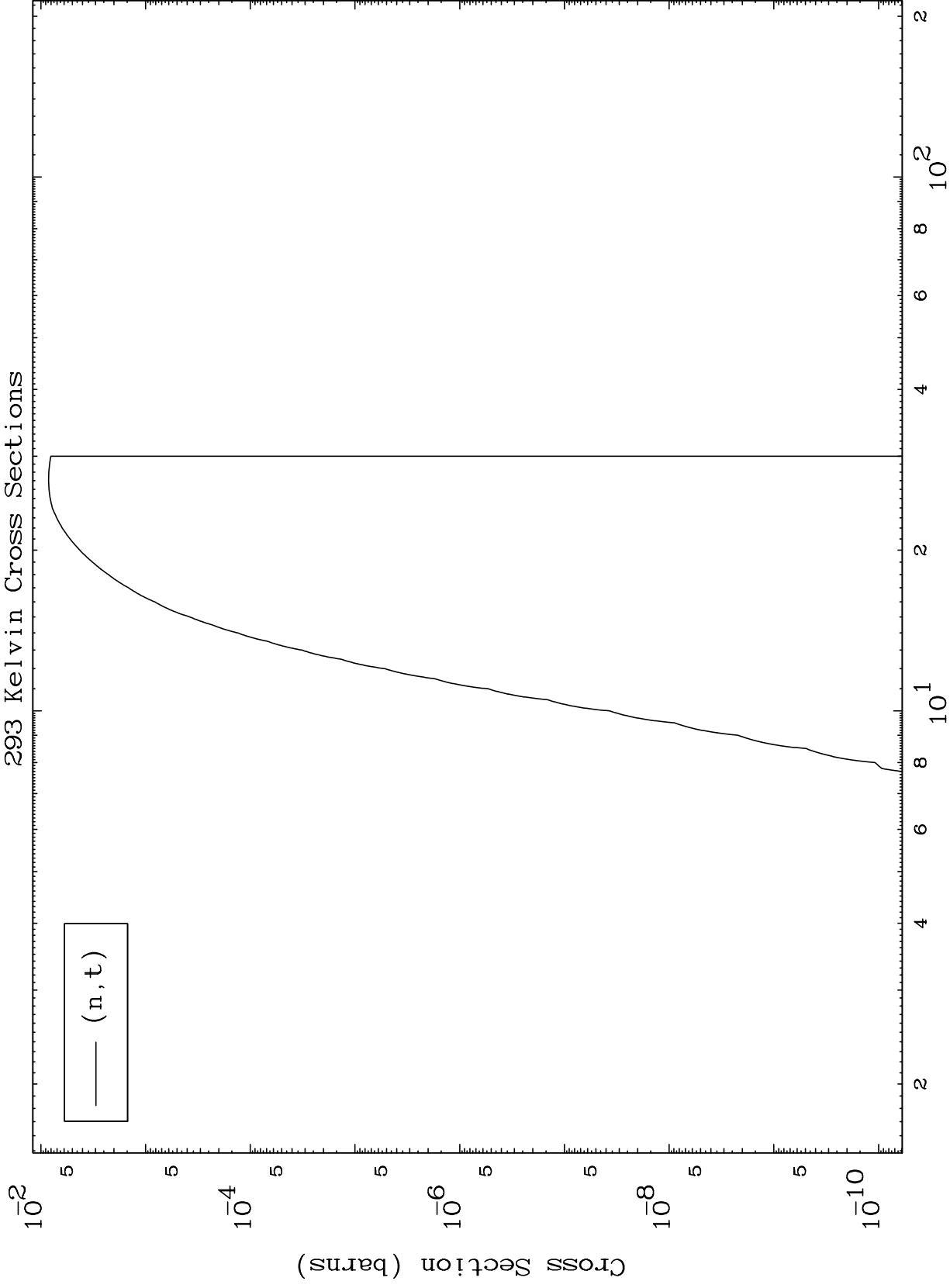
83-Bi-204



MAT 8310

(n,t) Levels
293 Kelvin Cross Sections

83-Bi-204



12

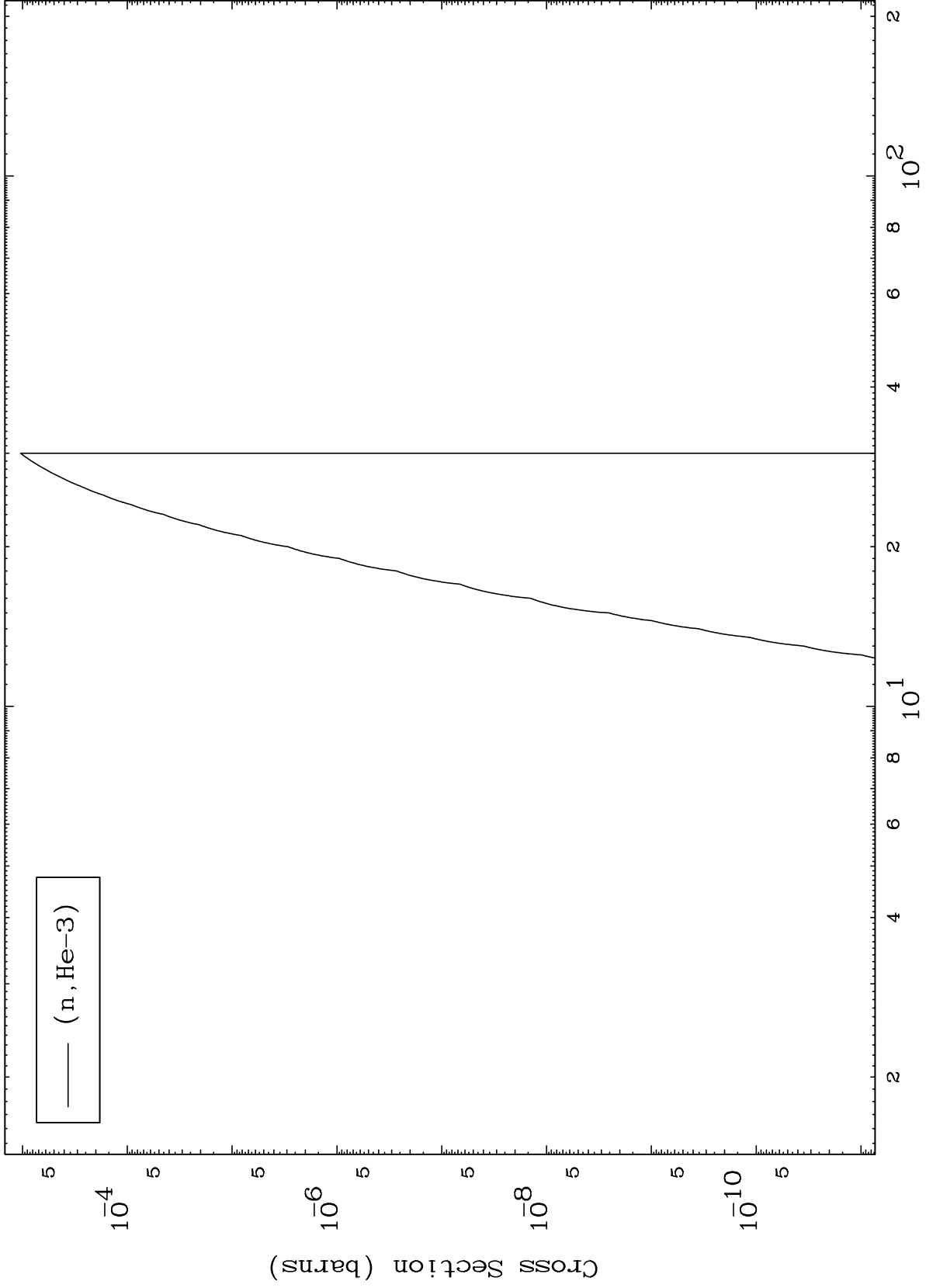
Incident Energy (MeV)

83-Bi-204

MAT 8310

(n,He3) Levels
293 Kelvin Cross Sections

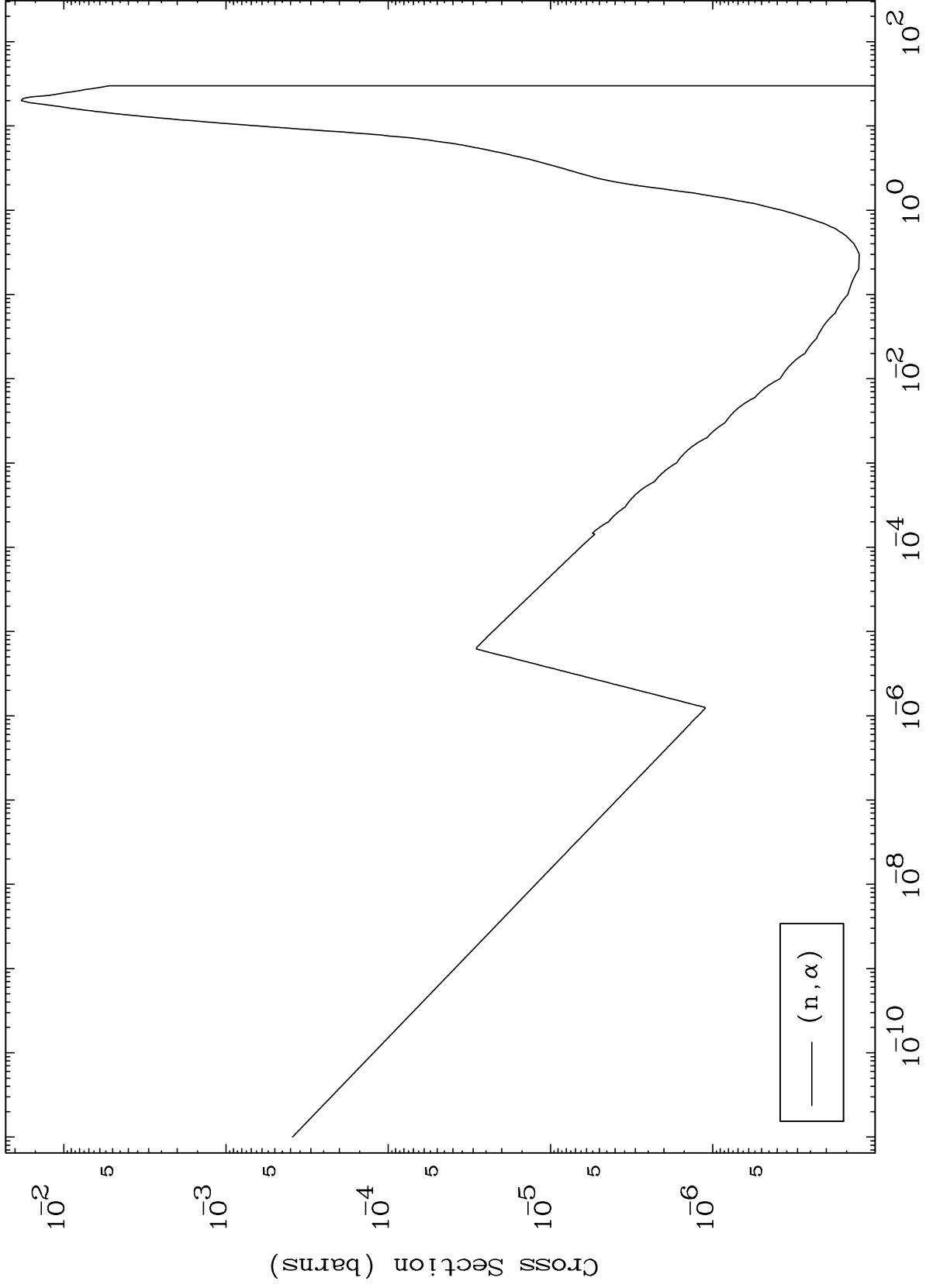
83-Bi-204



MAT 8310

(n, α) Levels
293 Kelvin Cross Sections

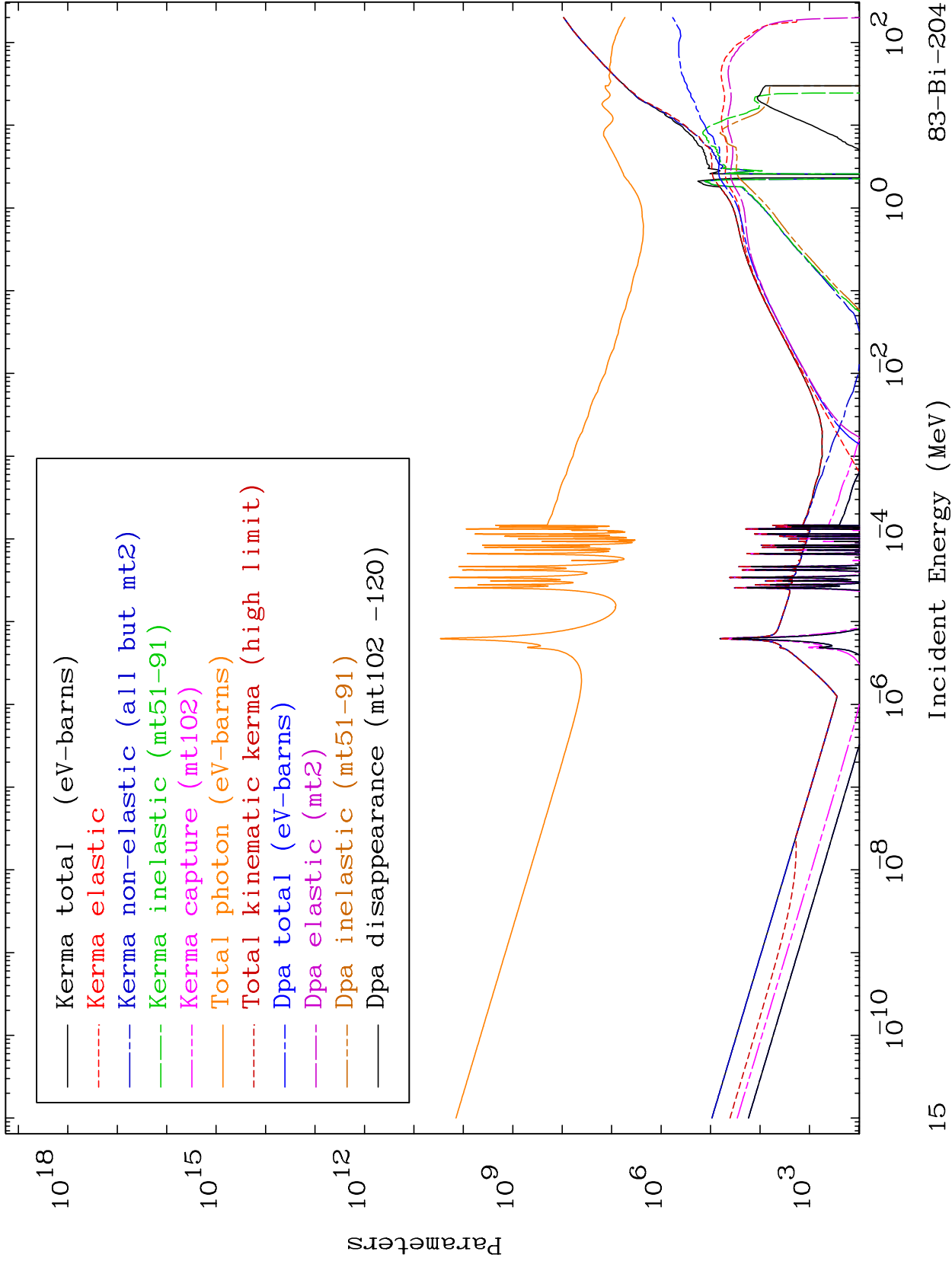
83-Bi-204

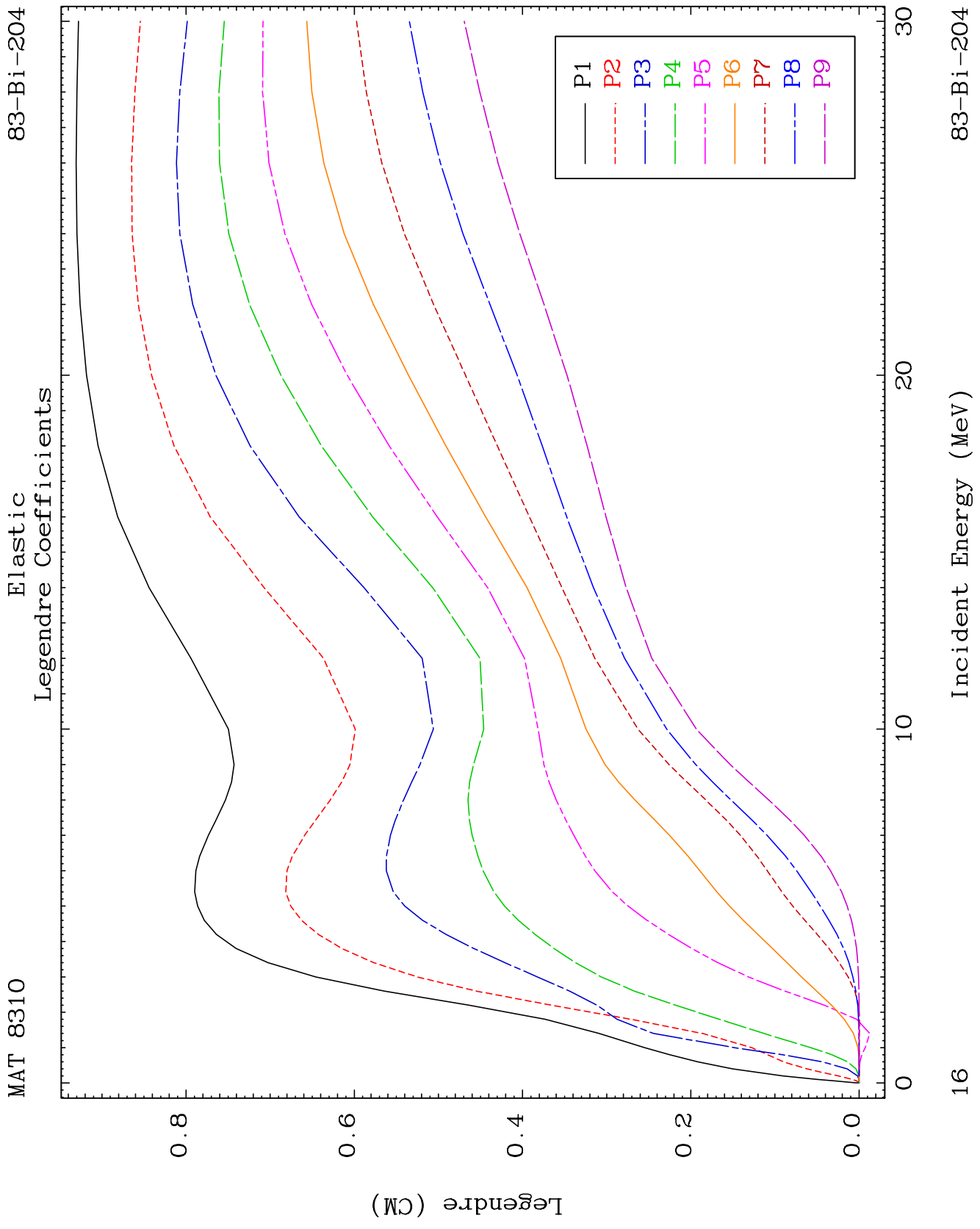


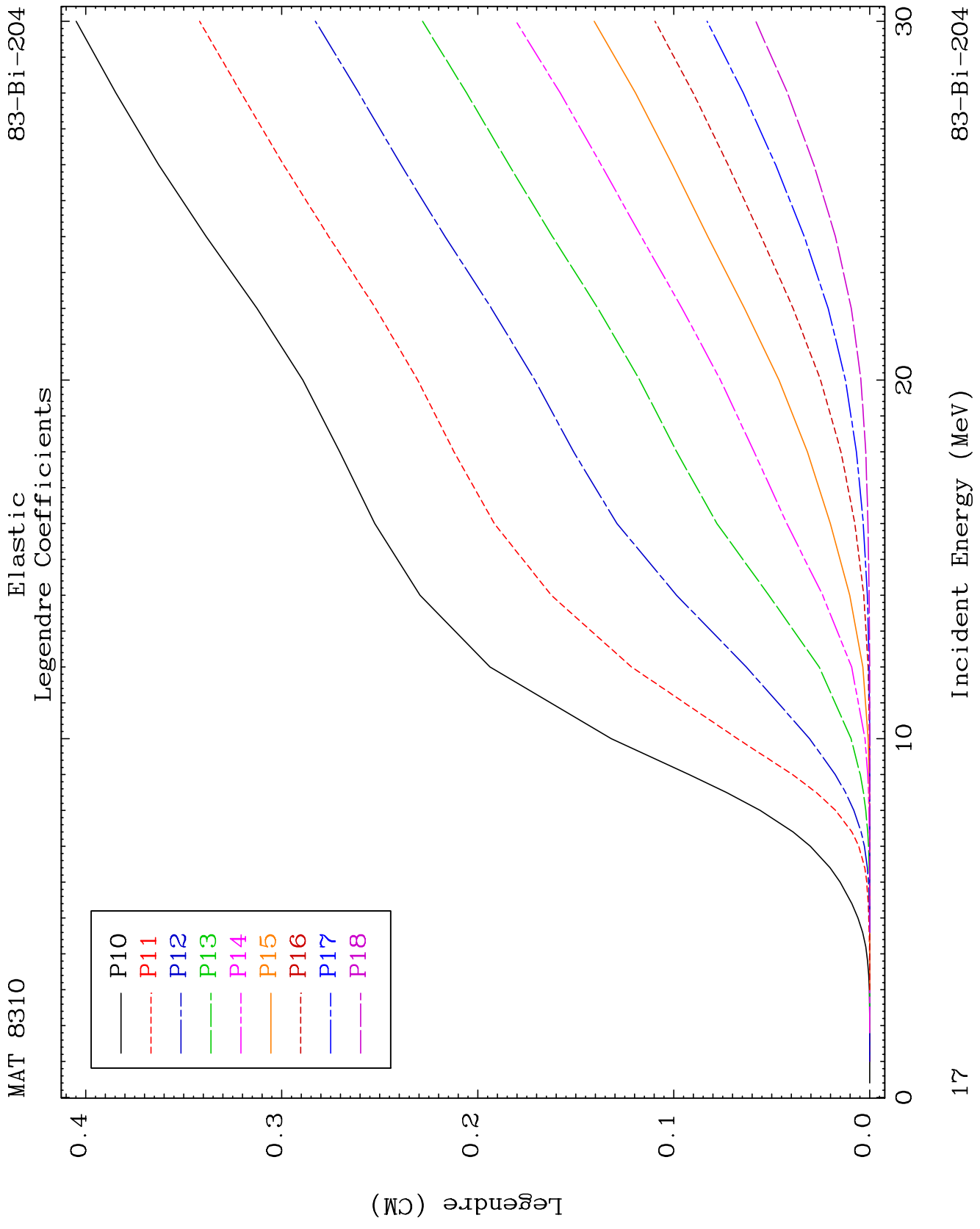
83-Bi-204

Incident Energy (MeV)

14



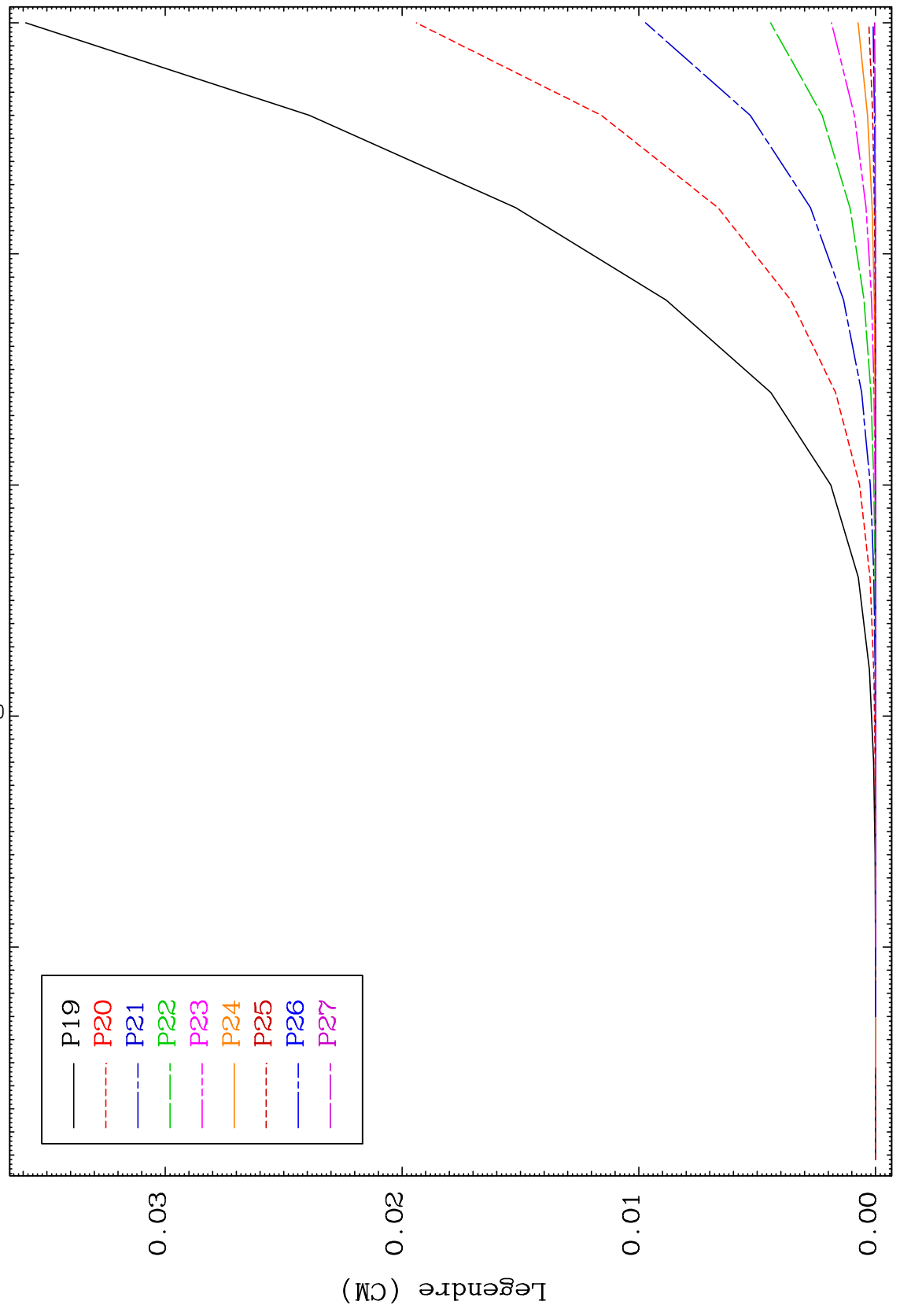




MAT 8310

Elastic Legendre Coefficients

83-Bi-204



18

Incident Energy (MeV)

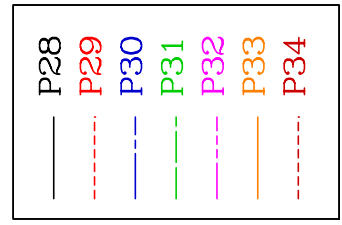
83-Bi-204

30

MAT 8310

Elastic Legendre Coefficients

83-Bi-204



$\times 10^{-5}$

Legendre (CM)

10

15

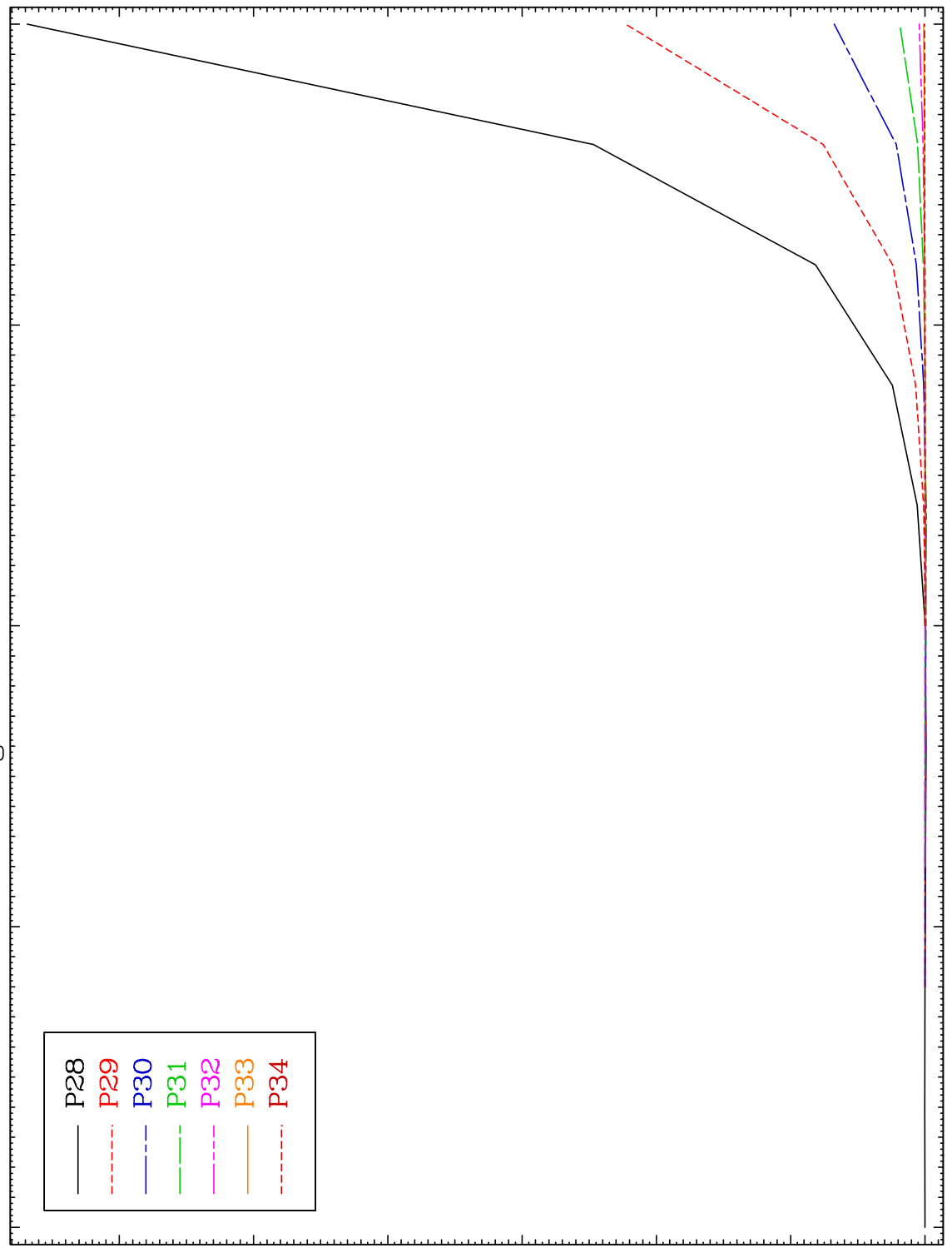
20

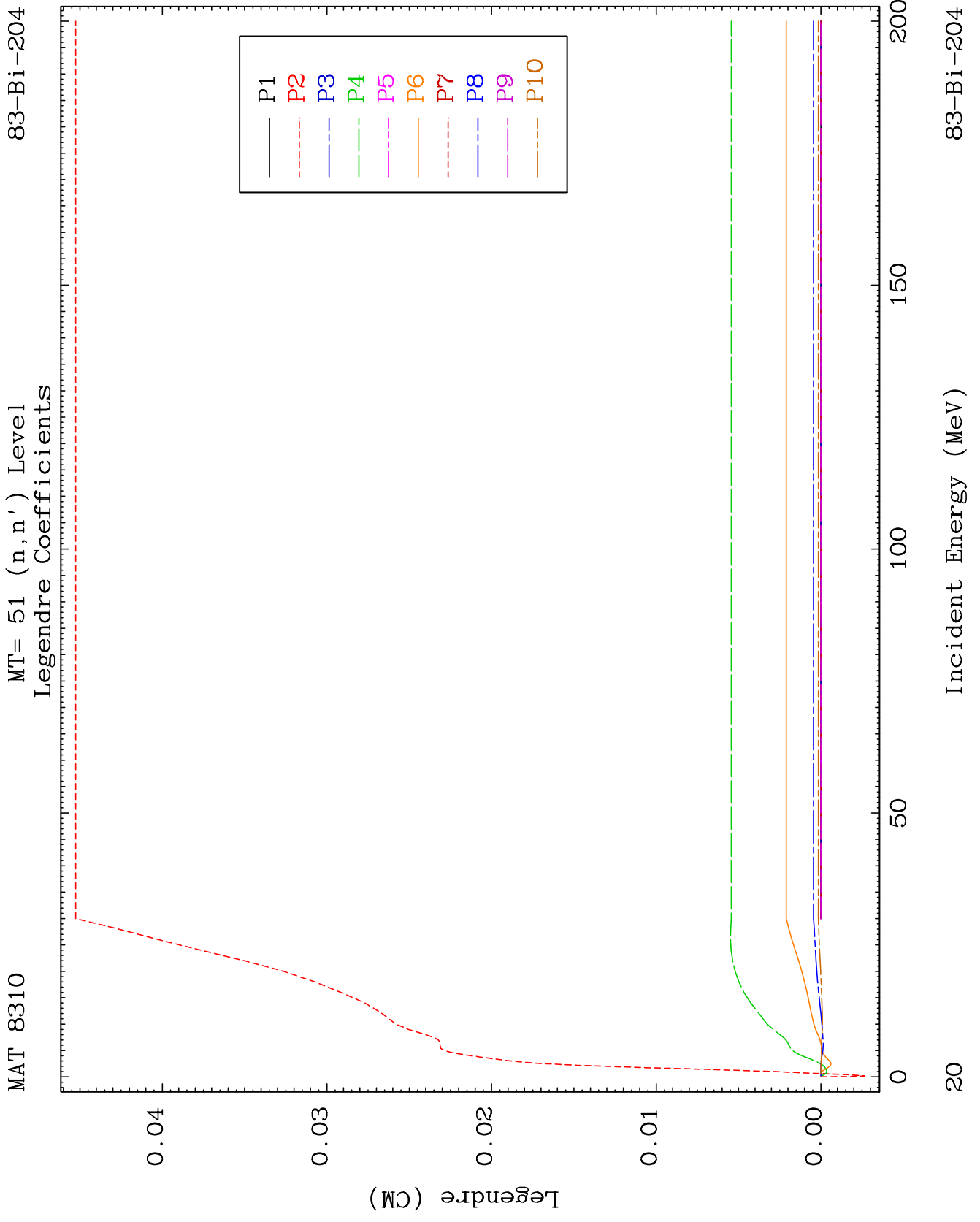
25

30

Incident Energy (MeV)

83-Bi-204

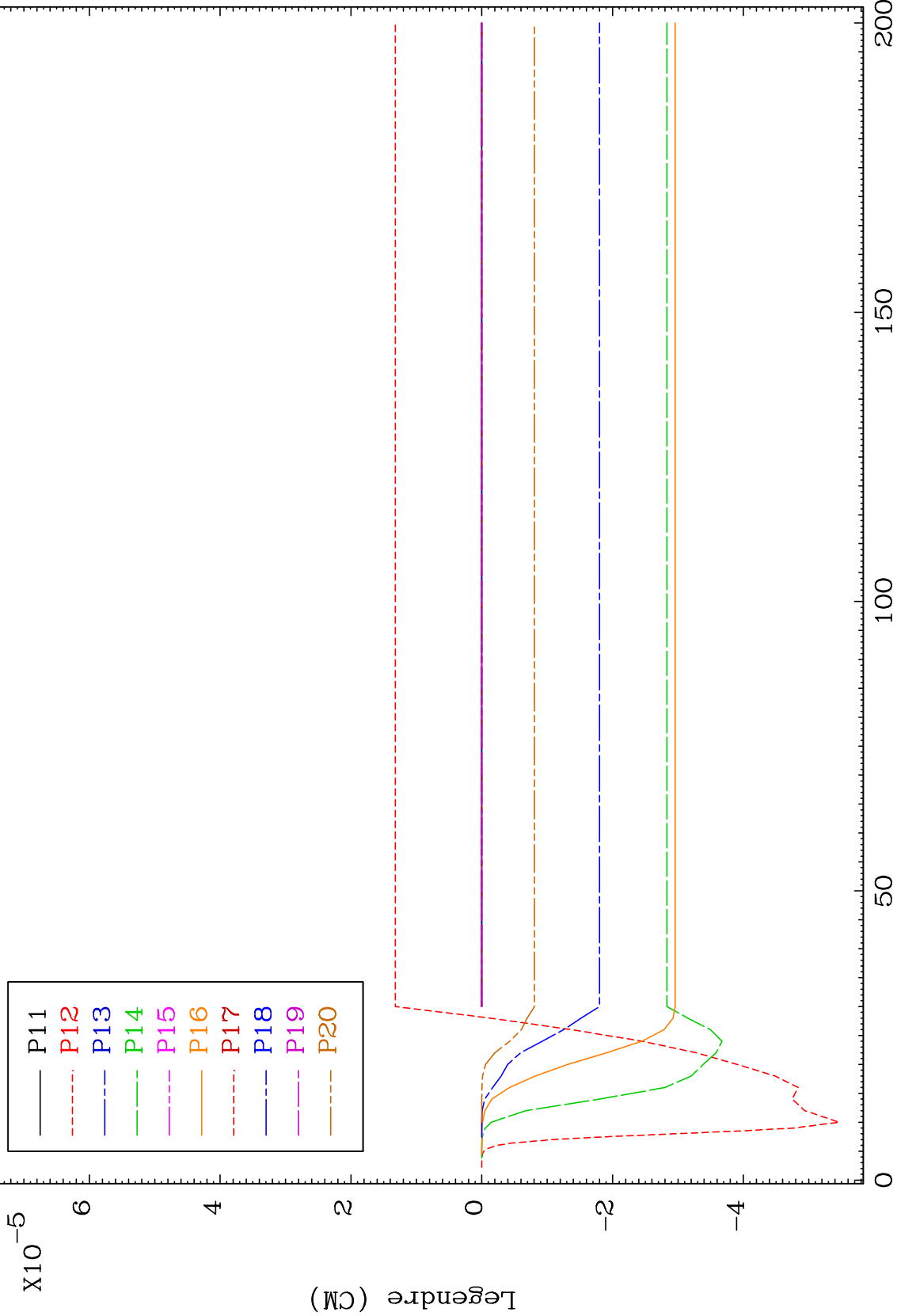
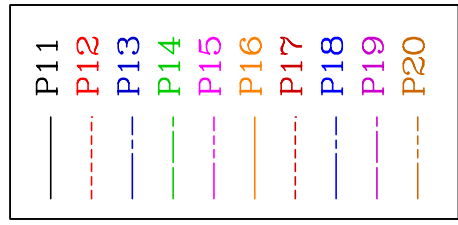




MAT 8310

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

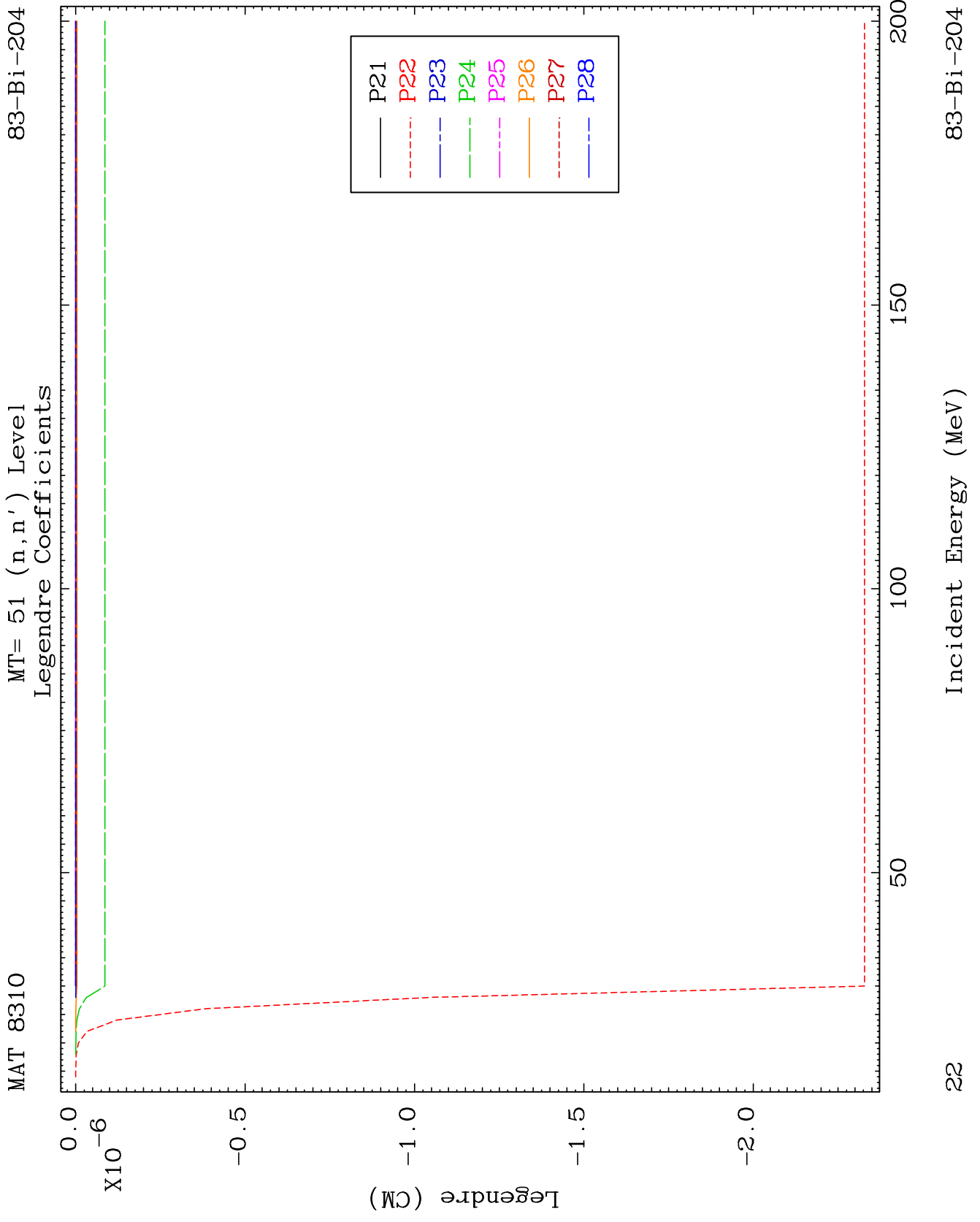
83-Bi-204



21

Incident Energy (MeV)

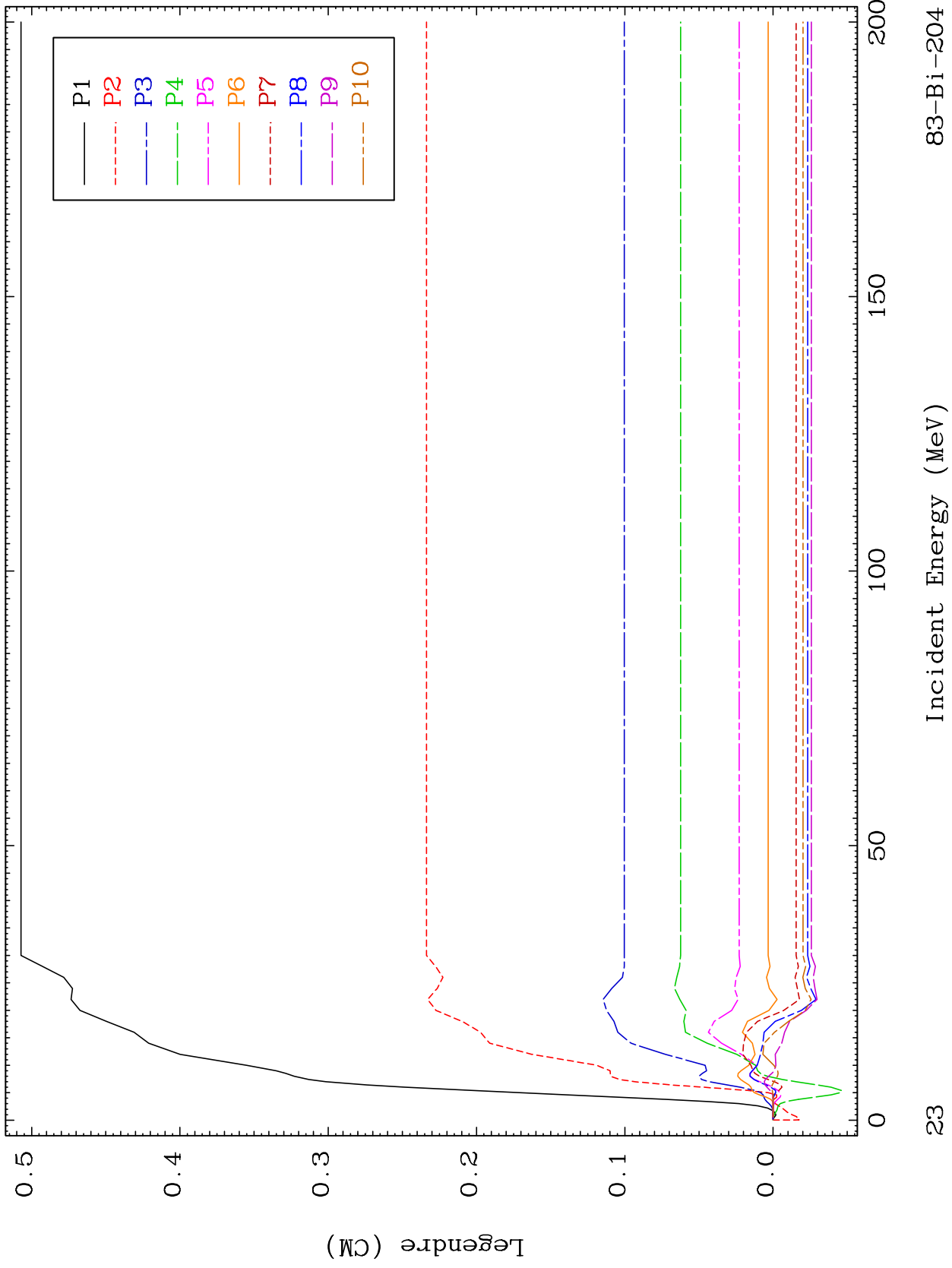
83-Bi-204



MAT 8310

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

83-Bi-204



83-Bi-204

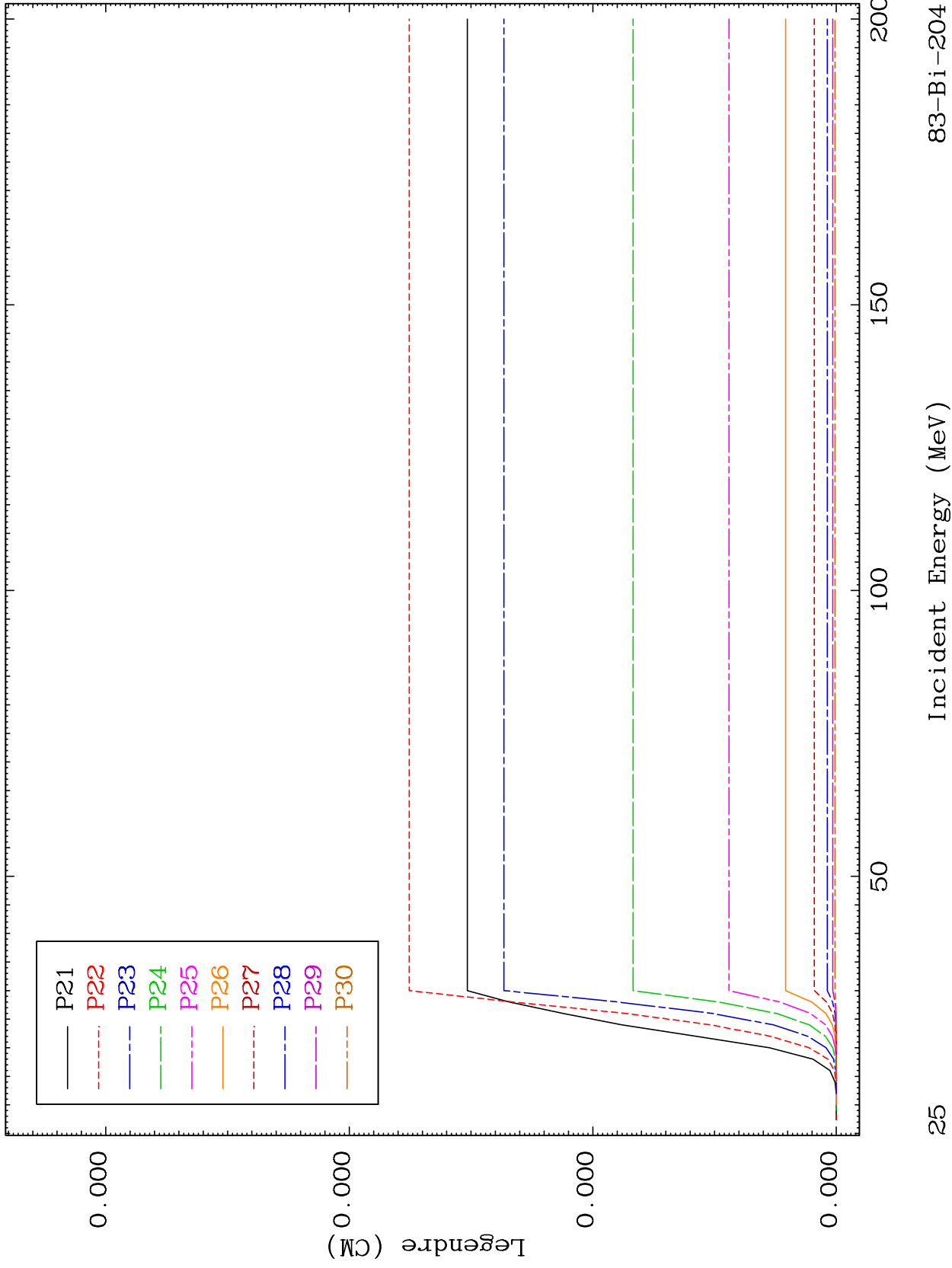
Incident Energy (MeV)

23

MAT 8310

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

83-Bi-204



25

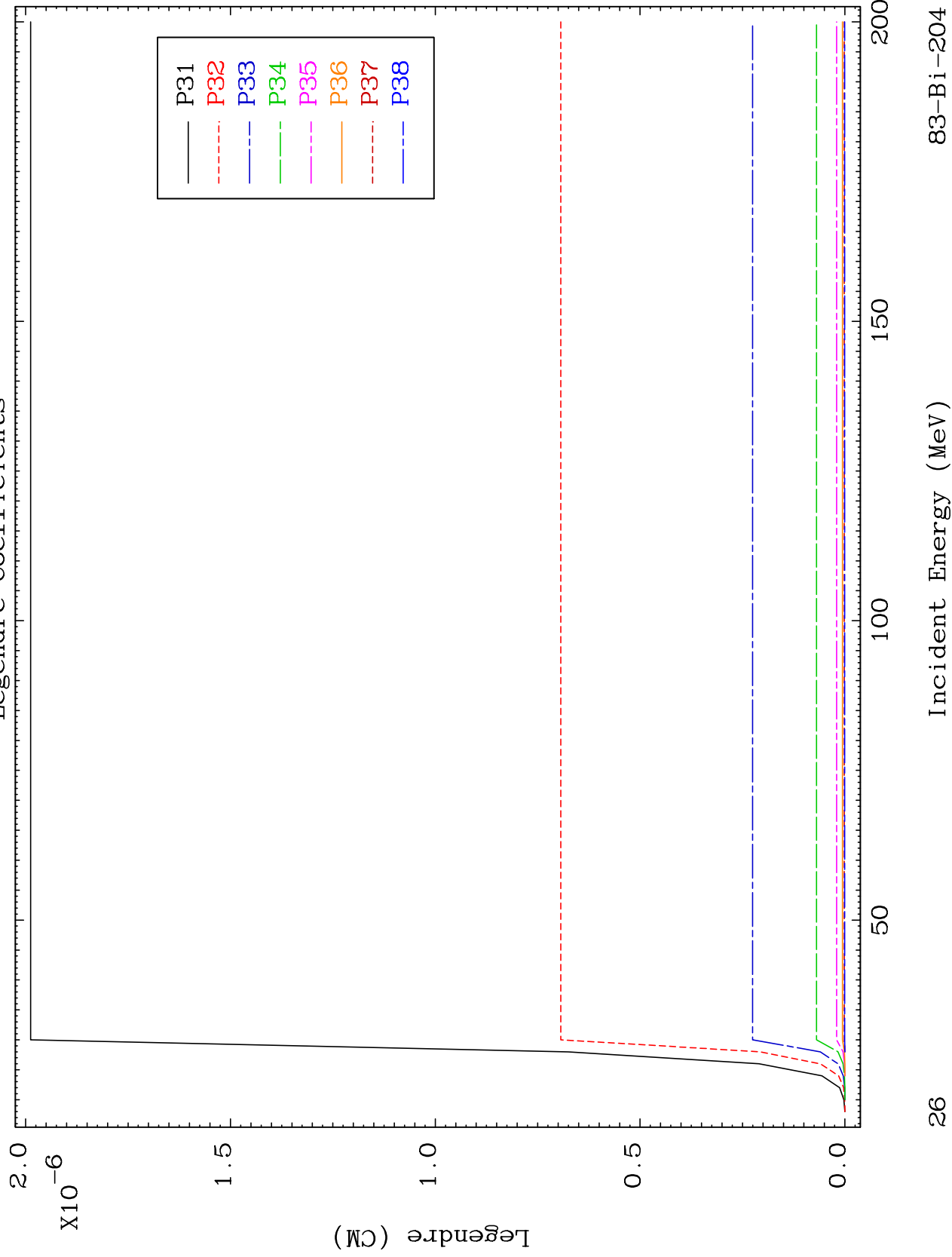
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

83-Bi-204



26

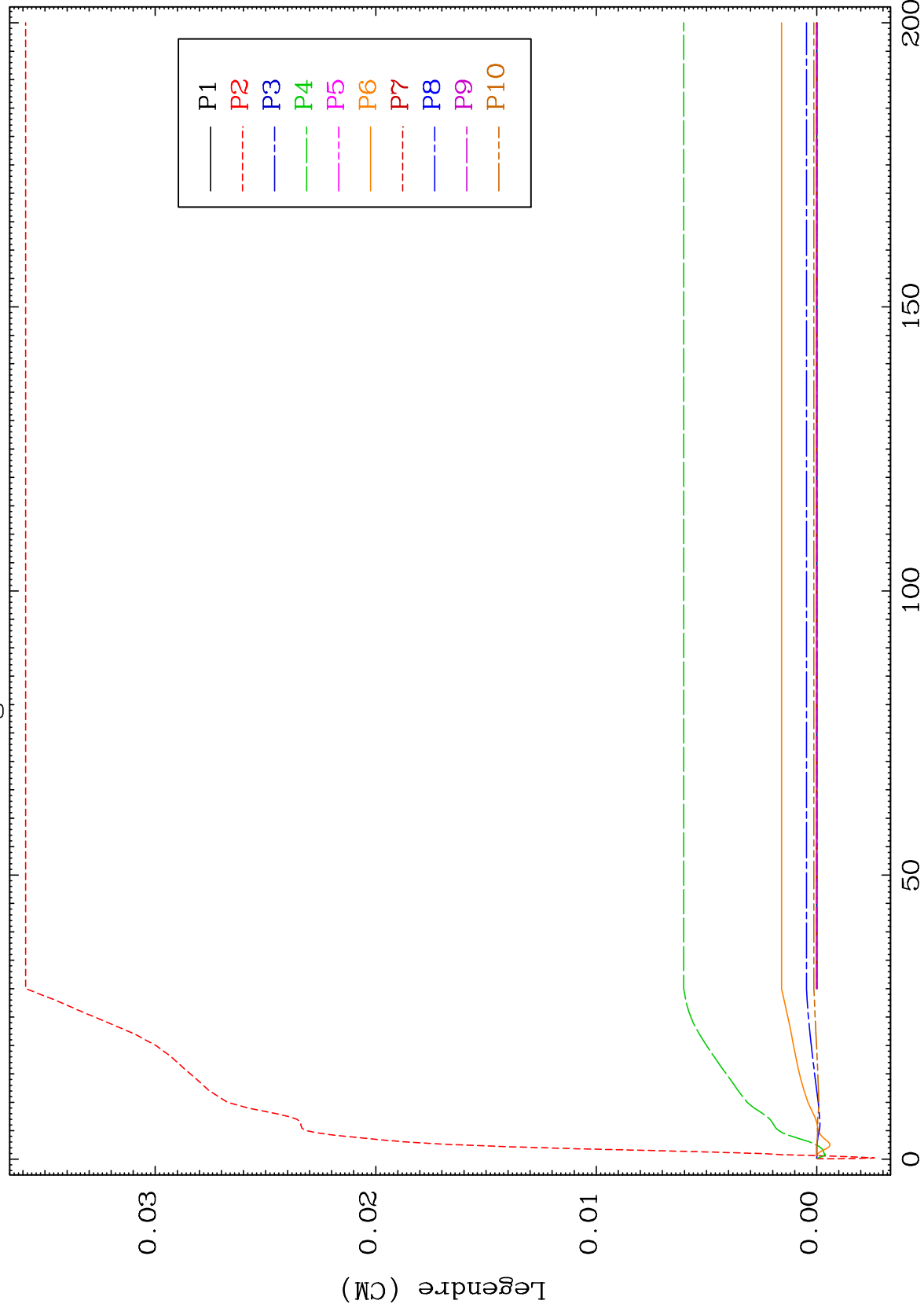
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

83-Bi-204



27

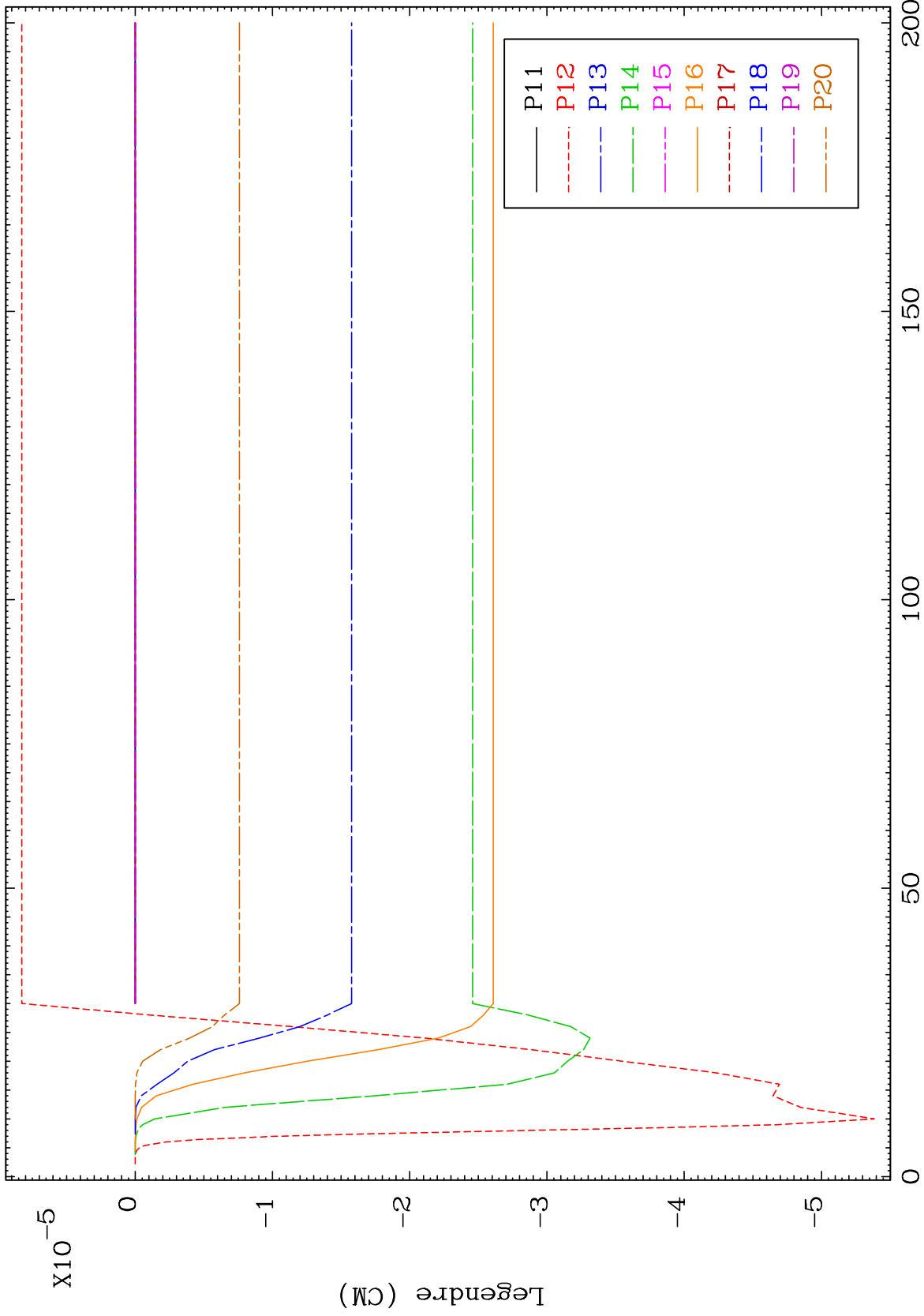
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

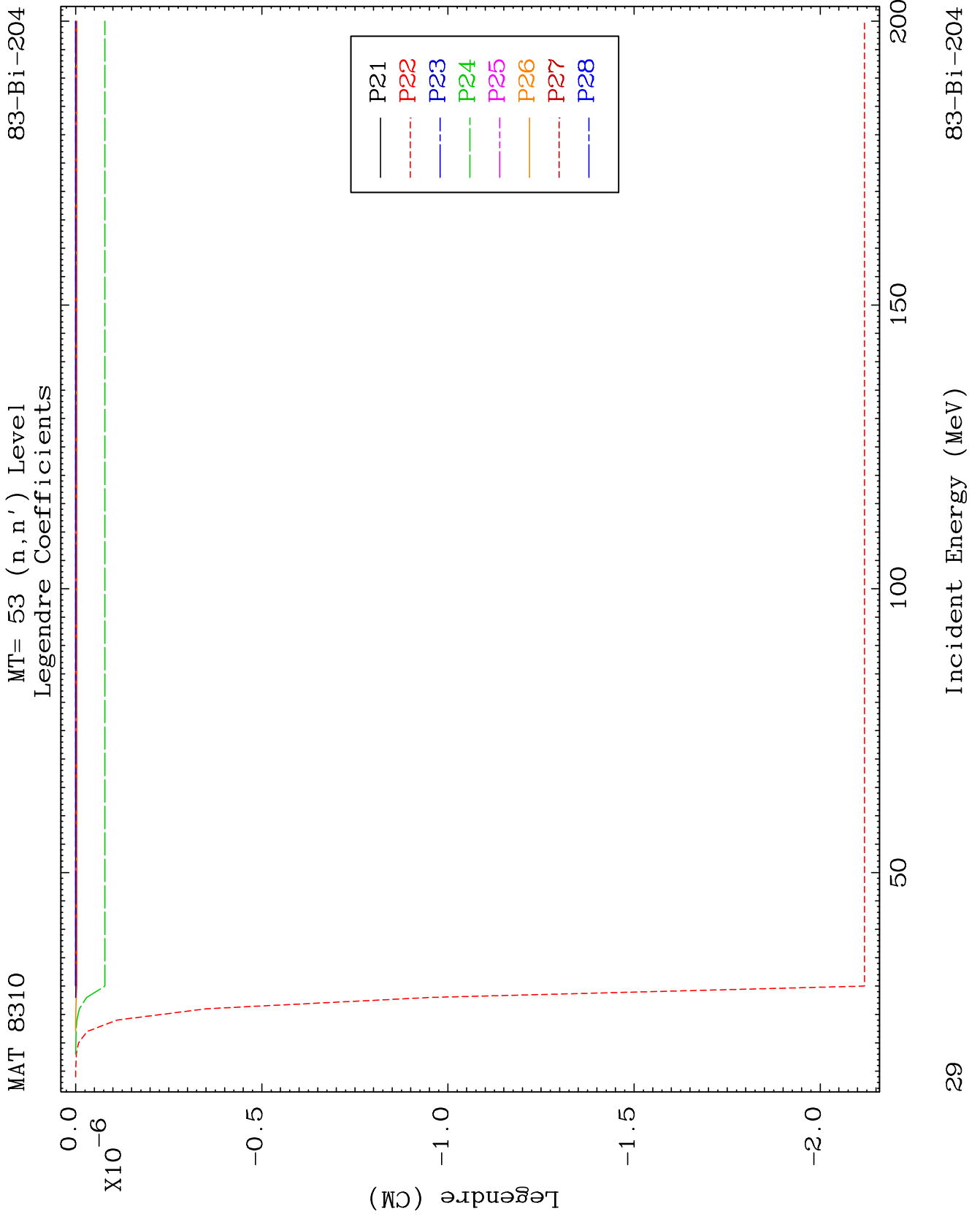
83-Bi-204

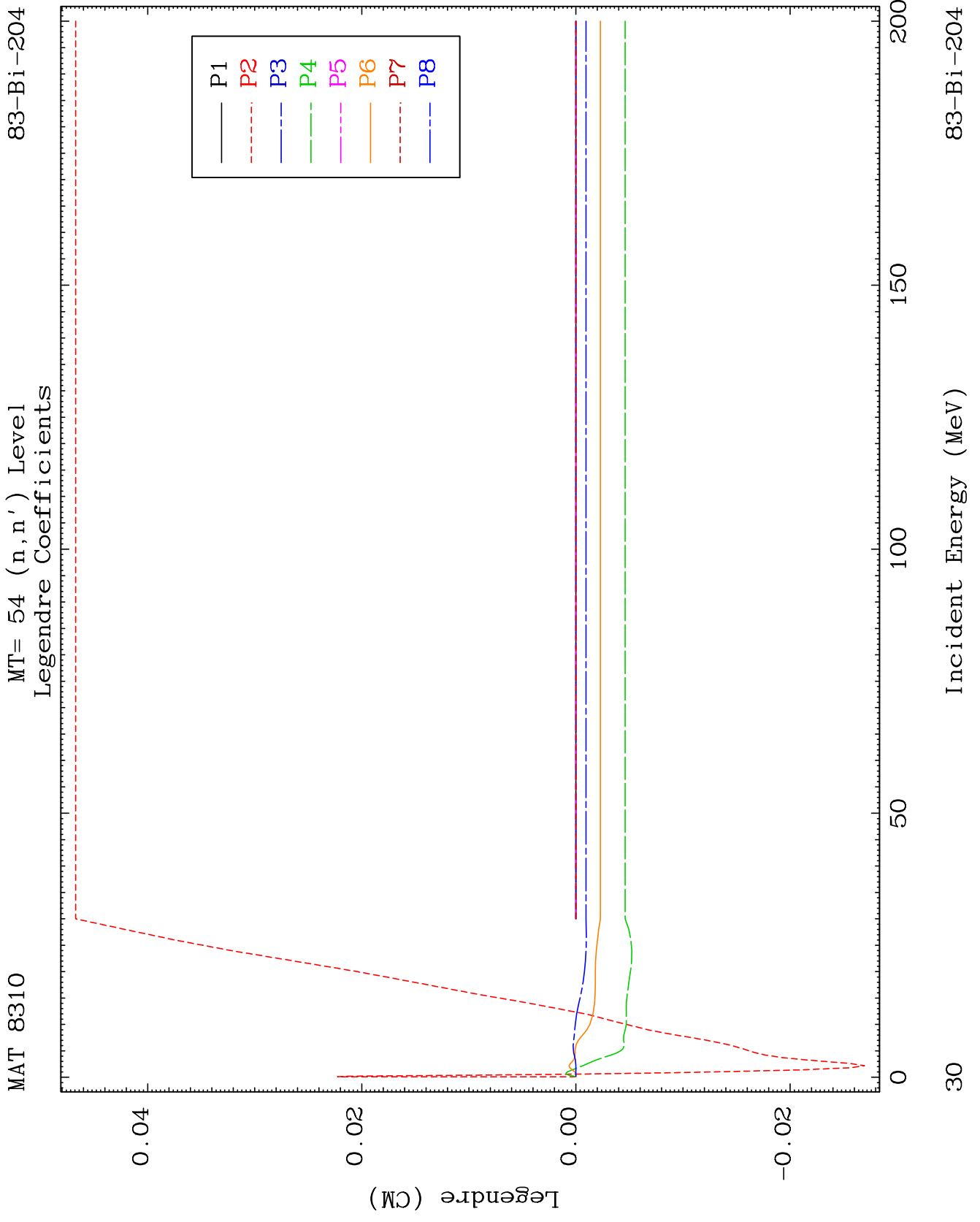


28

83-Bi-204

83-Bi-204

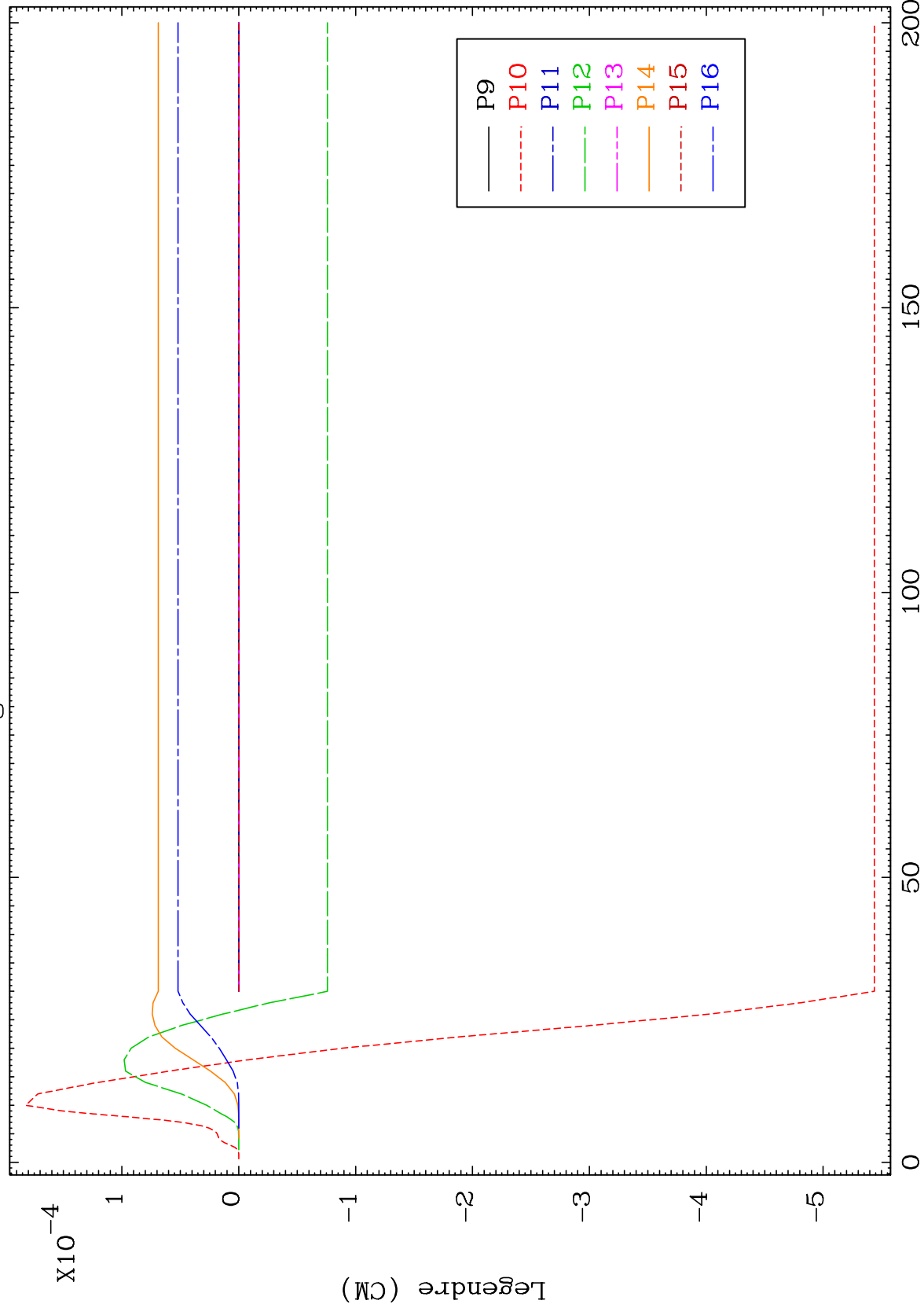




MAT 8310

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

83-Bi-204



31

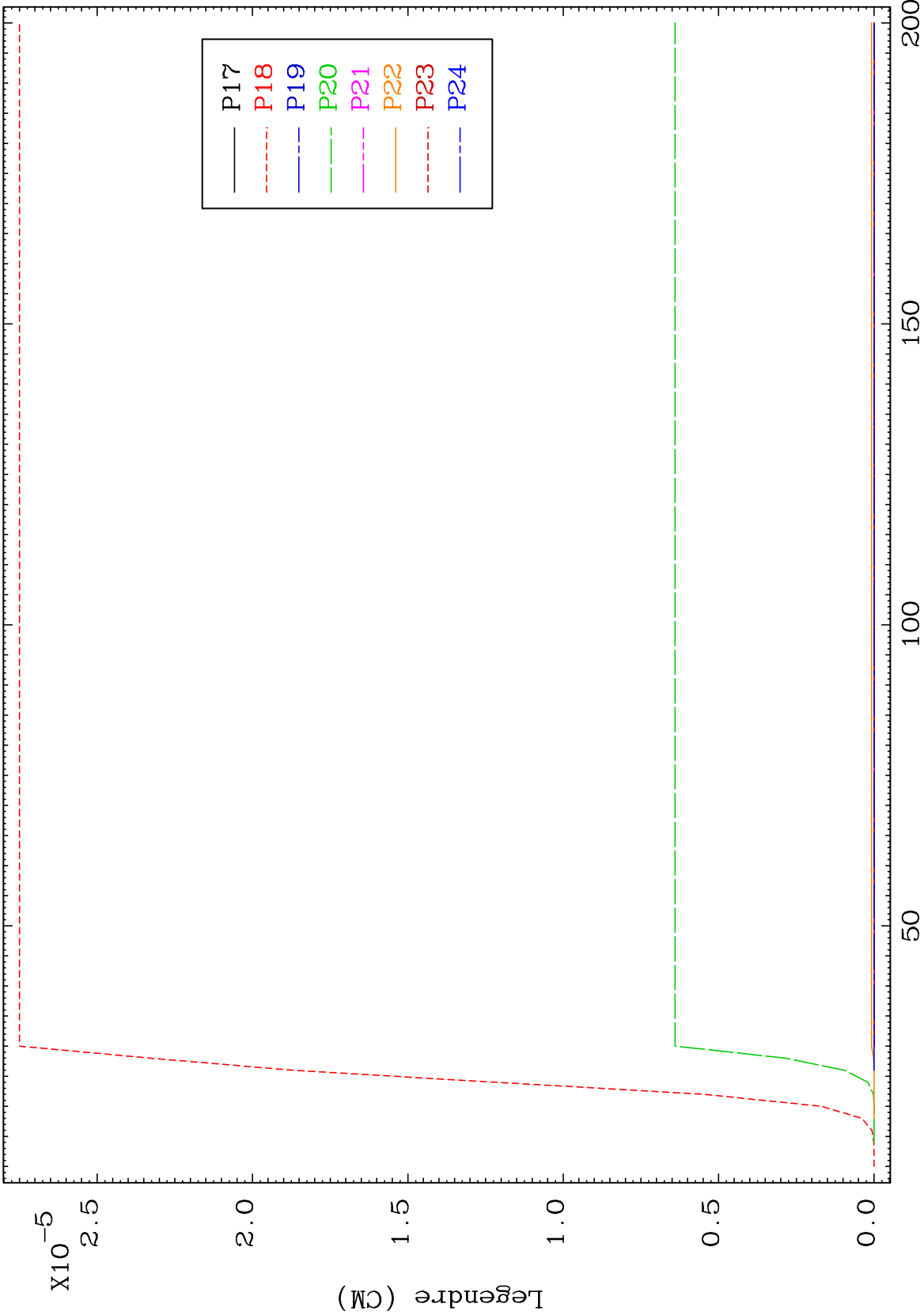
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

83-Bi-204



83-Bi-204

Incident Energy (MeV)

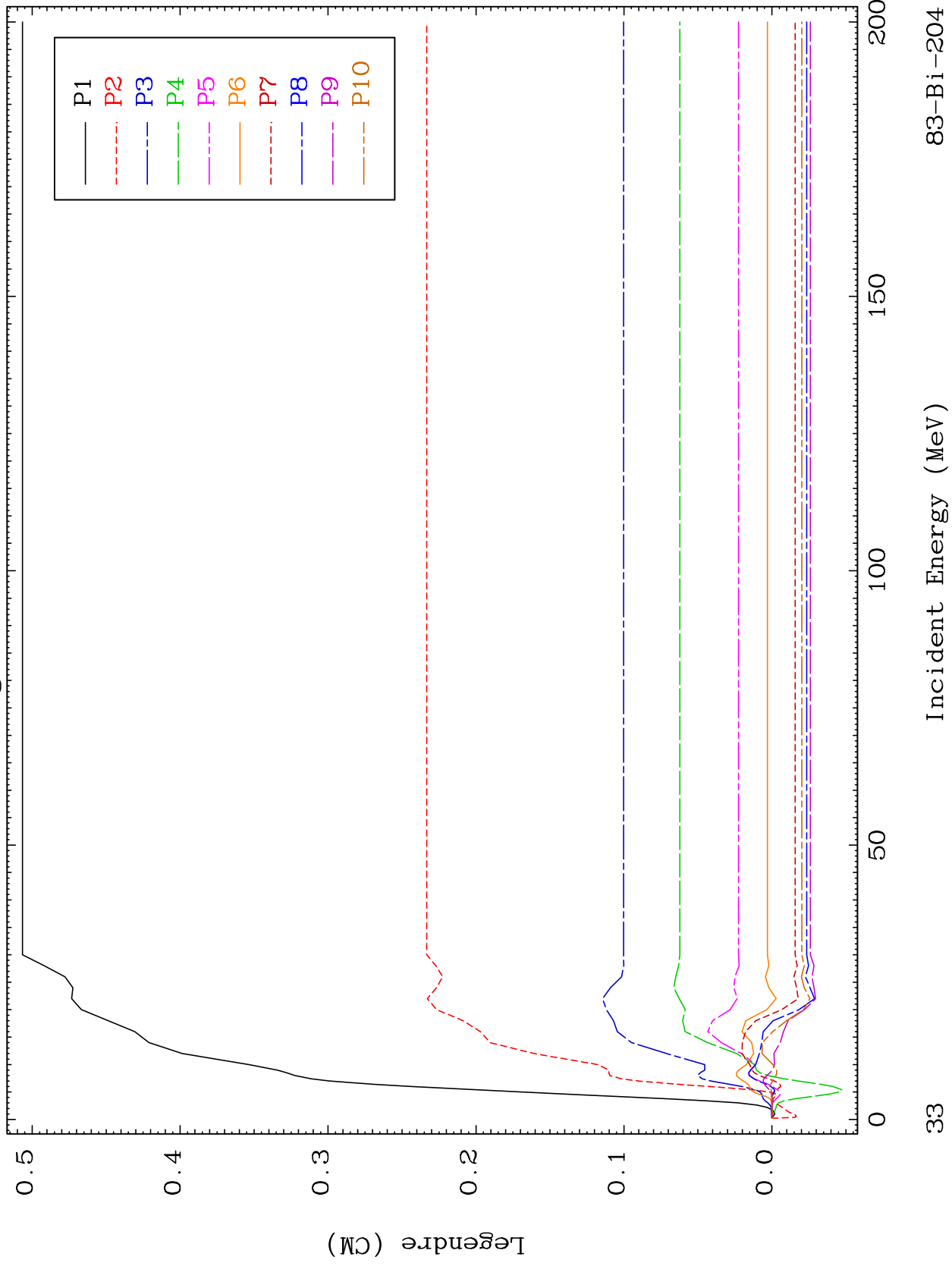
32

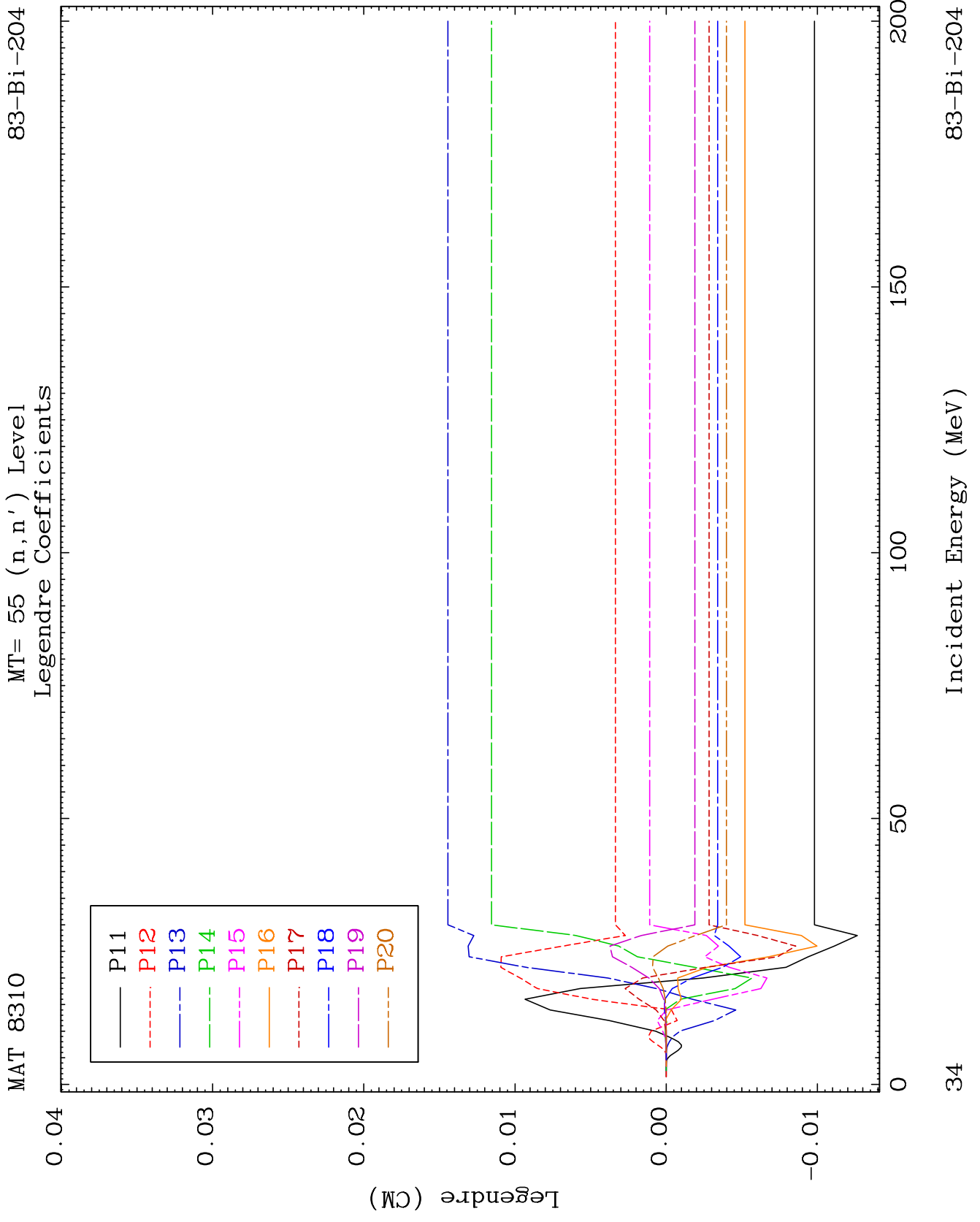
MAT 8310

MT= 55 (n,n') Level

83-Bi-204

Legendre Coefficients

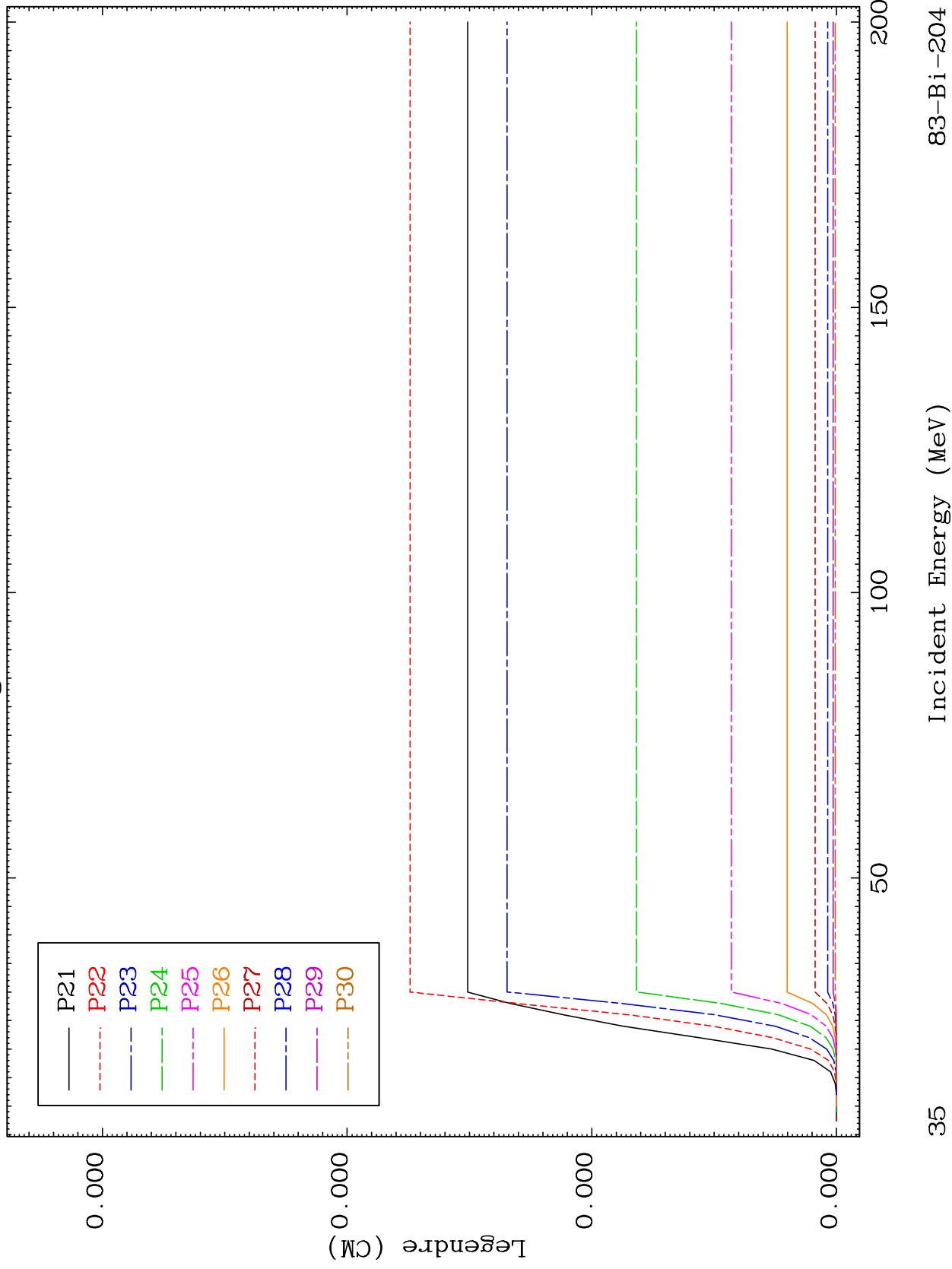




MAT 8310

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

83-Bi-204



35

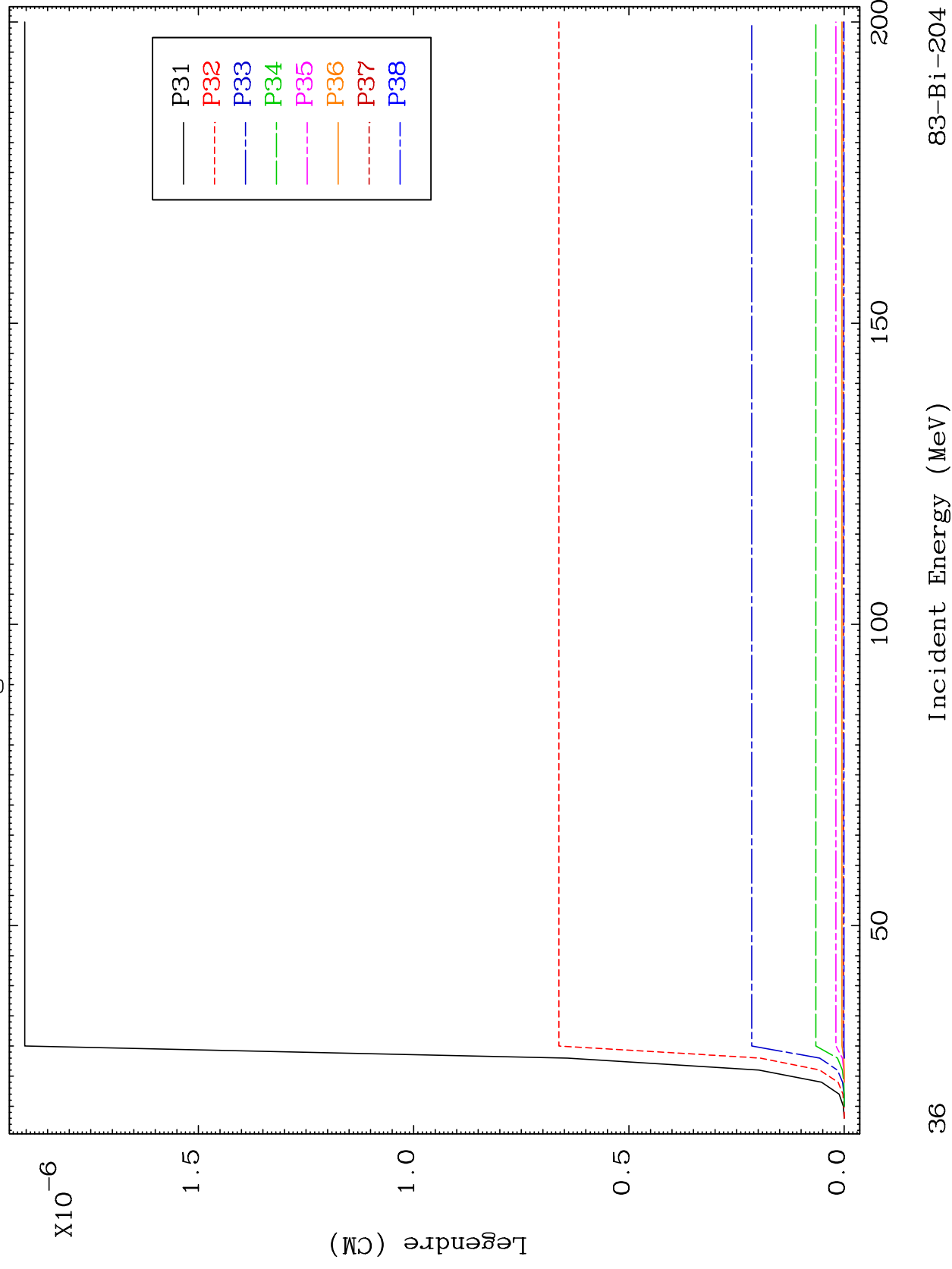
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

83-Bi-204

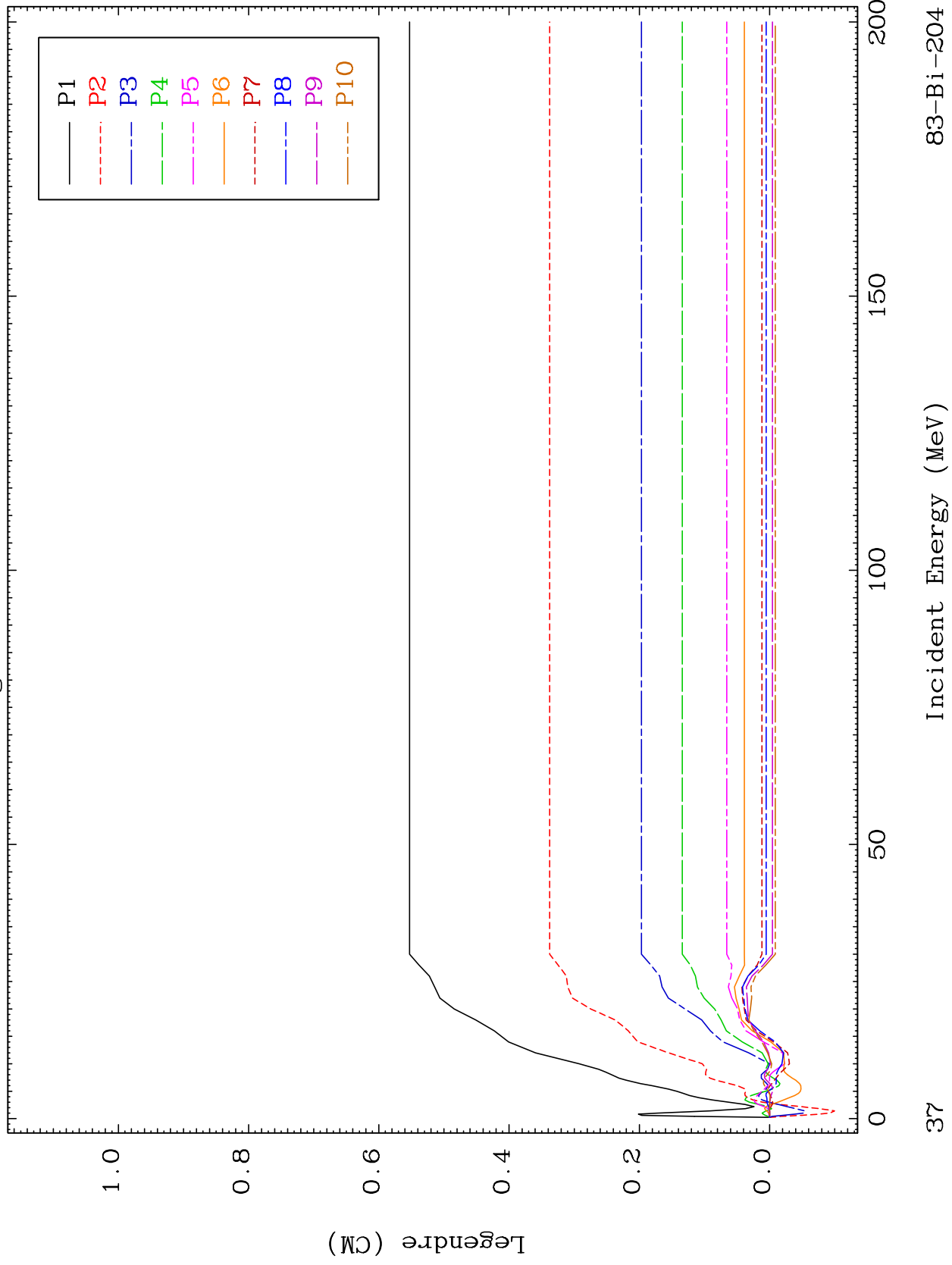


36

MAT 8310

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

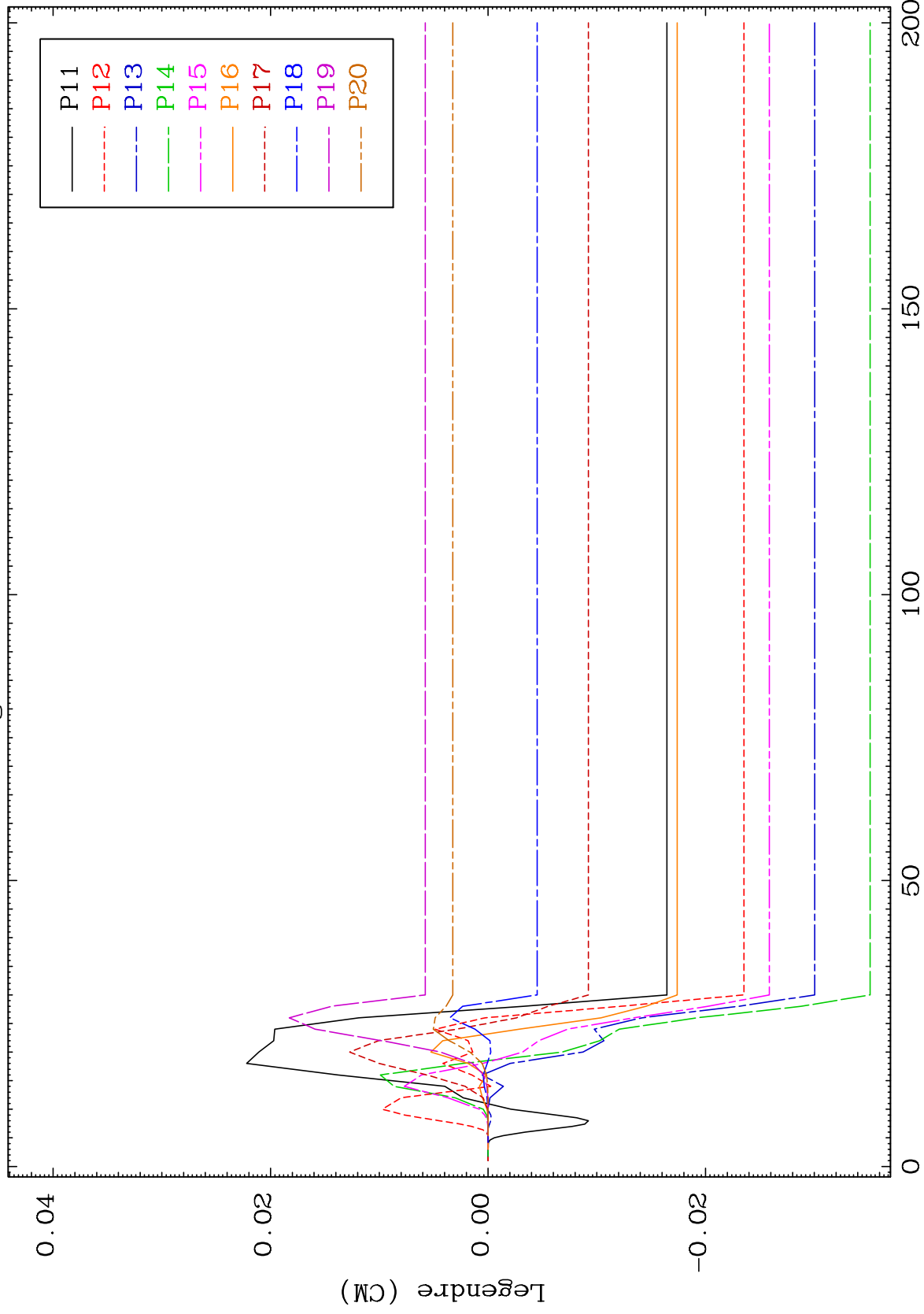
83-Bi-204



MAT 8310

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

83-Bi-204



38

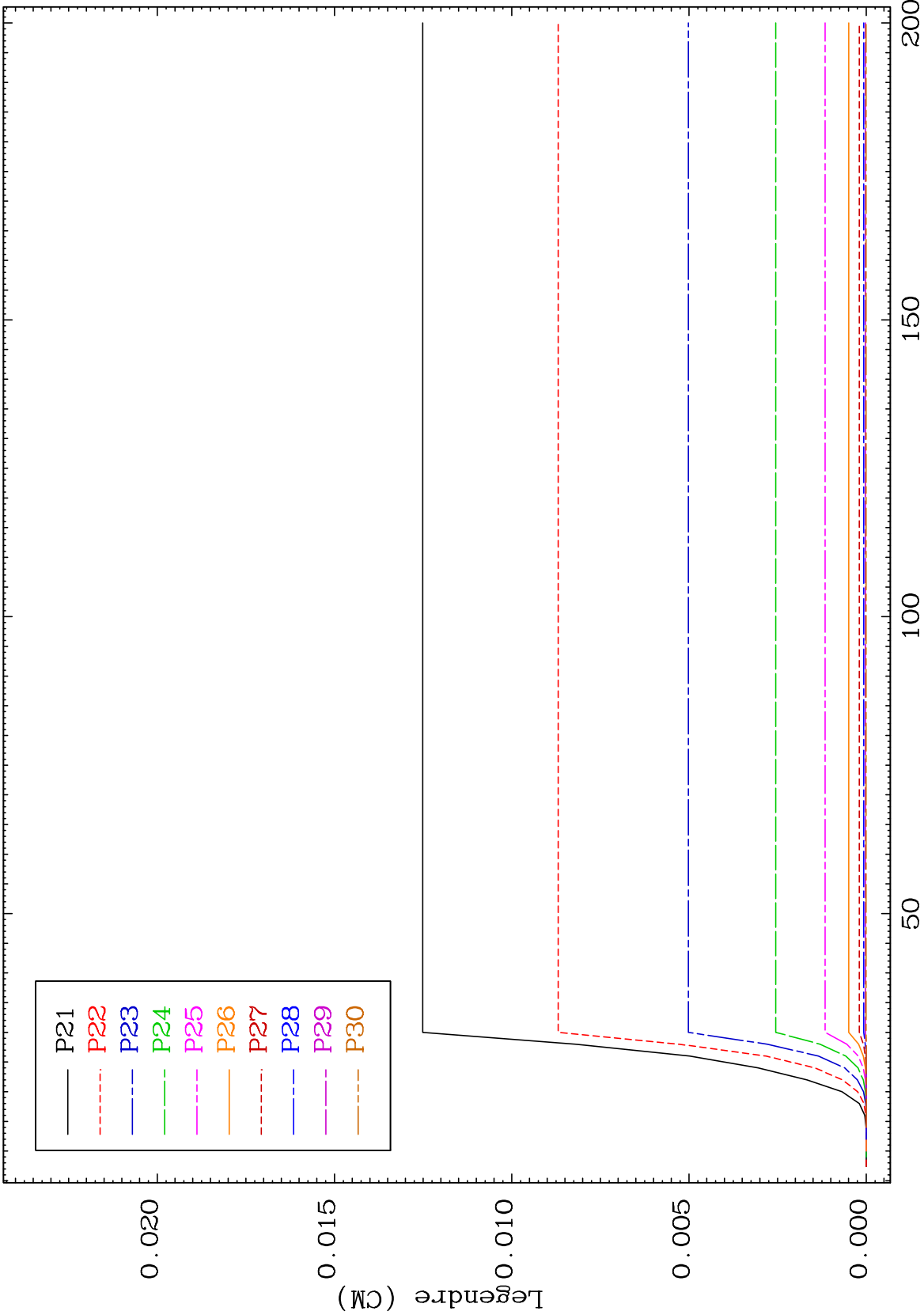
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

83-Bi-204



39

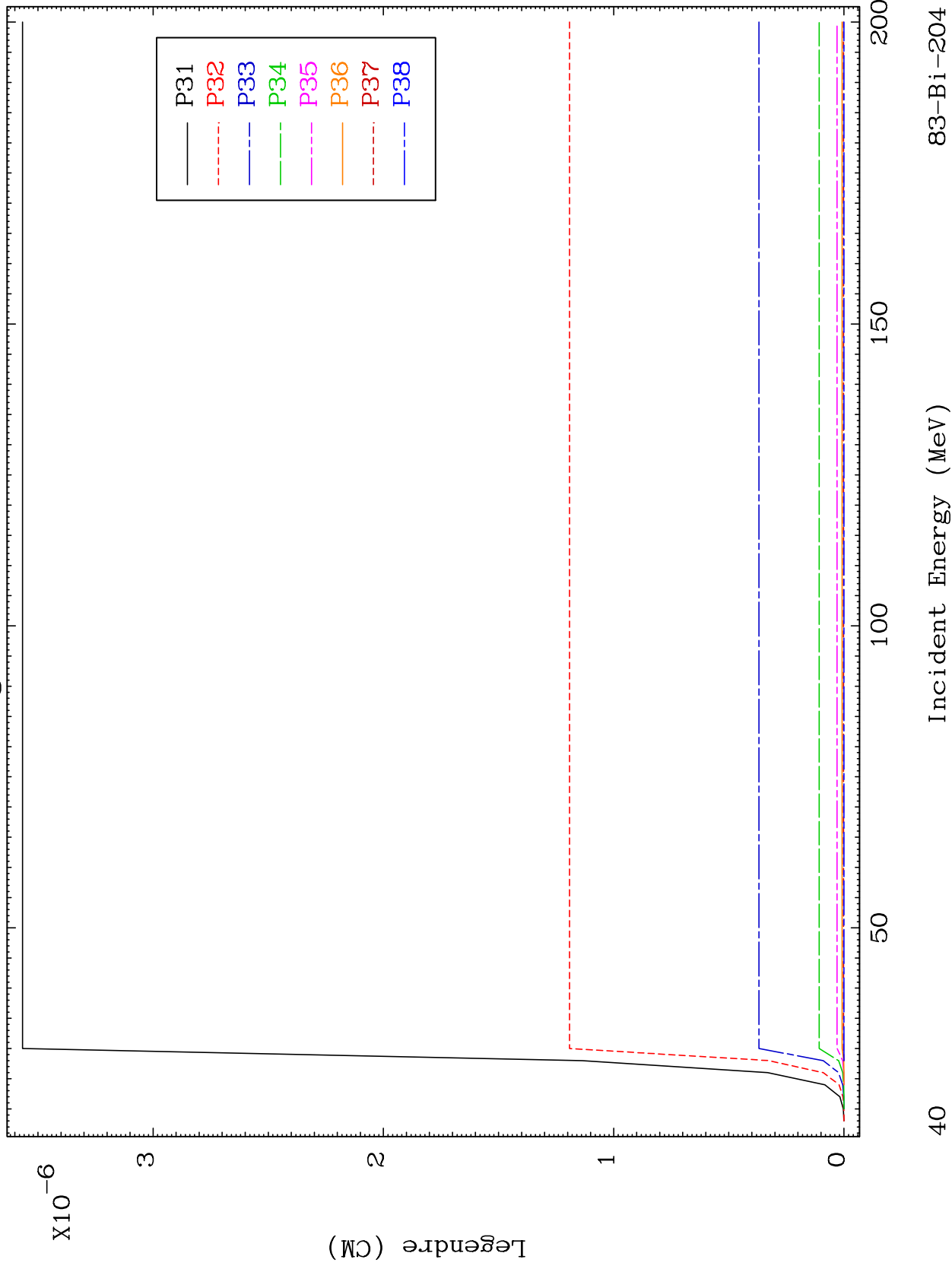
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

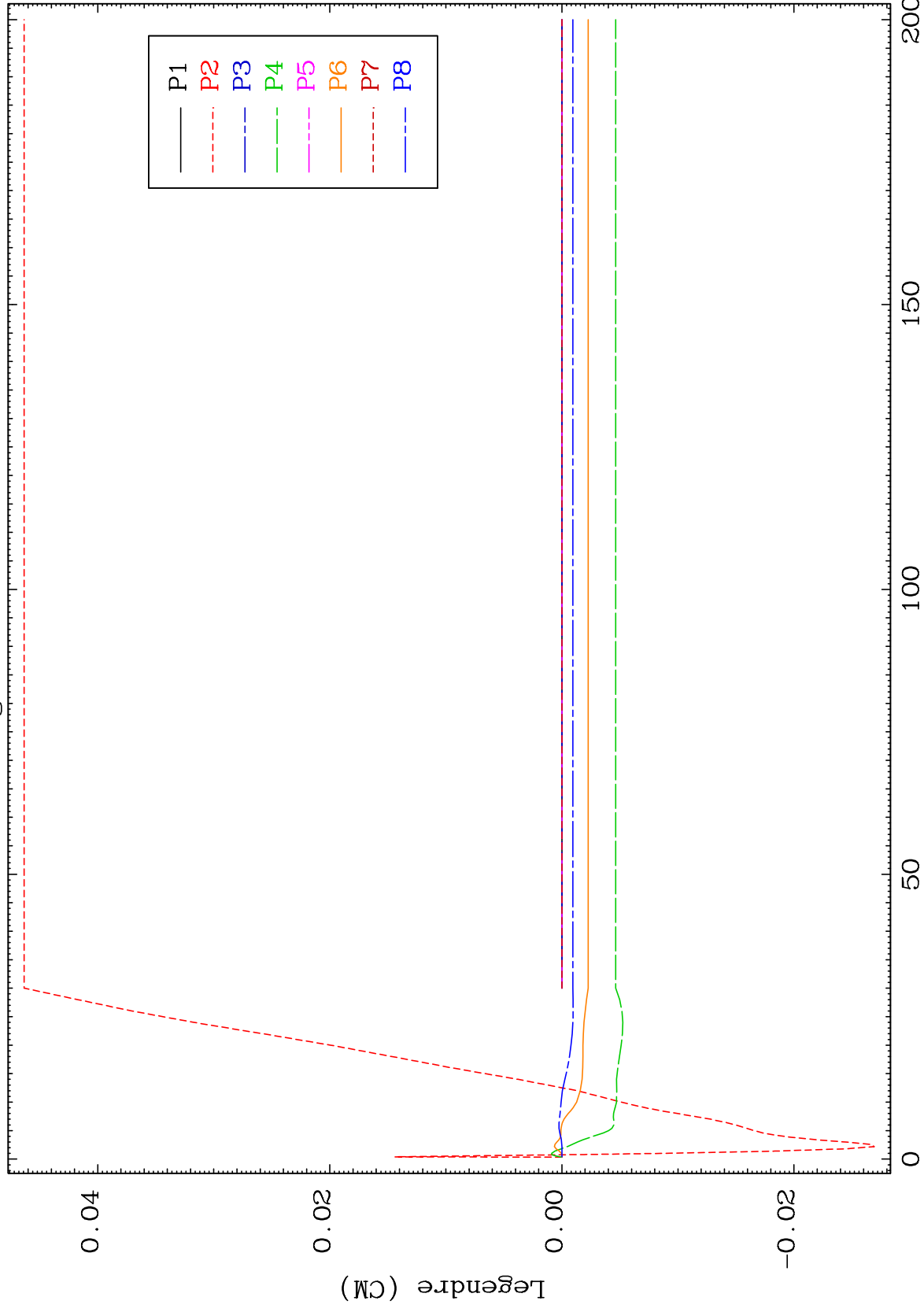
83-Bi-204



MAT 8310

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

83-Bi-204



83-Bi-204

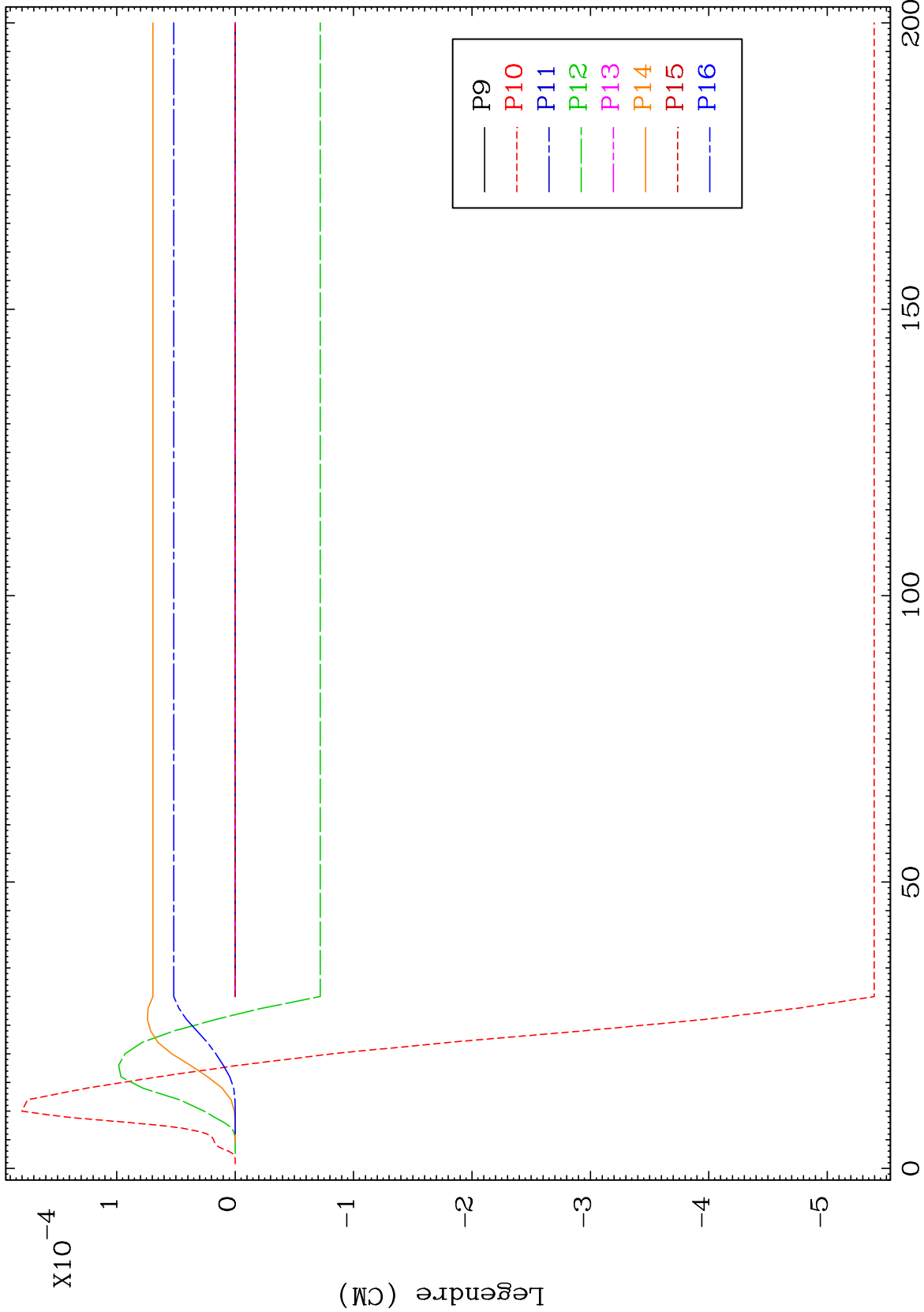
Incident Energy (MeV)

41

MAT 8310

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

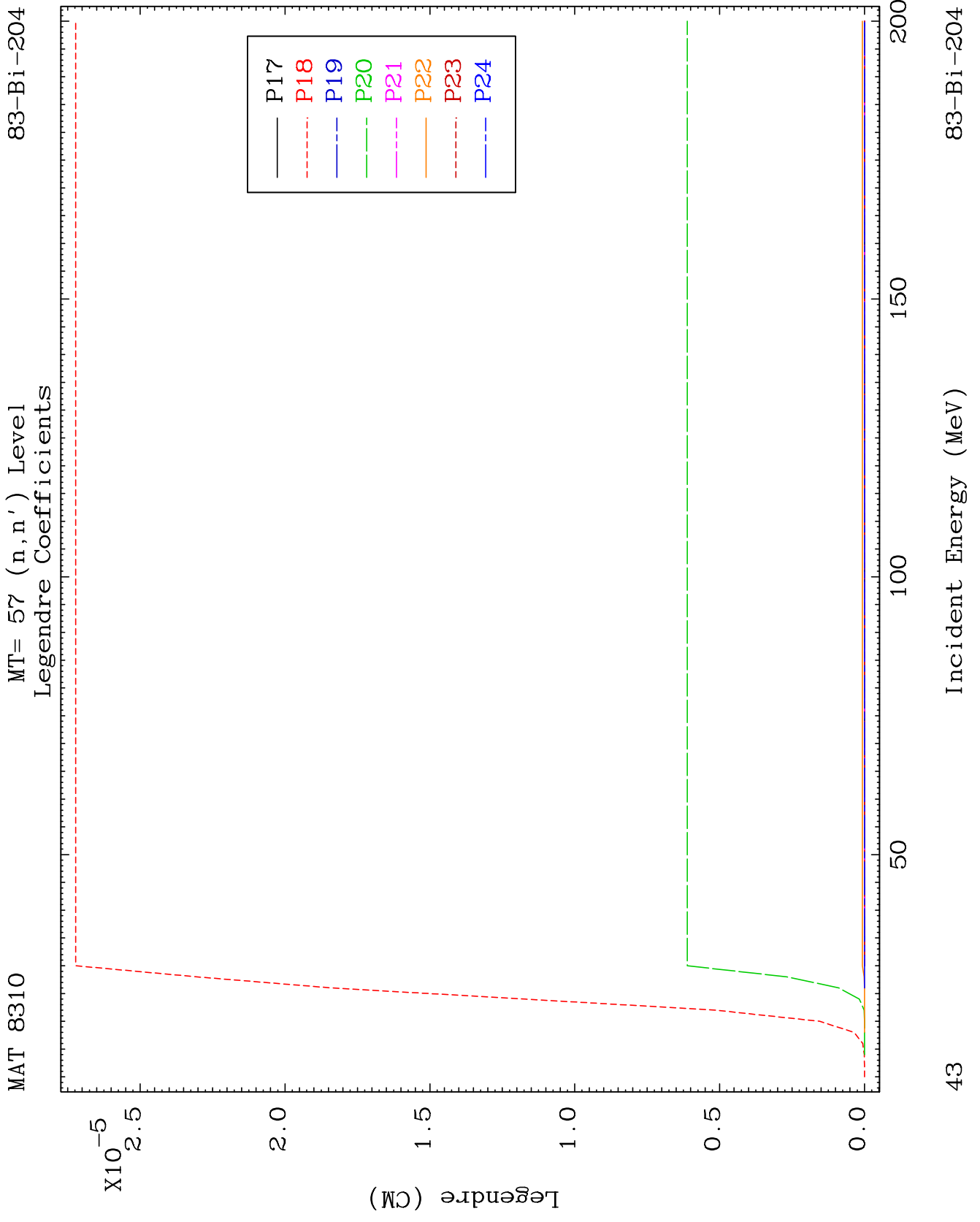
83-Bi-204



42

Incident Energy (MeV)

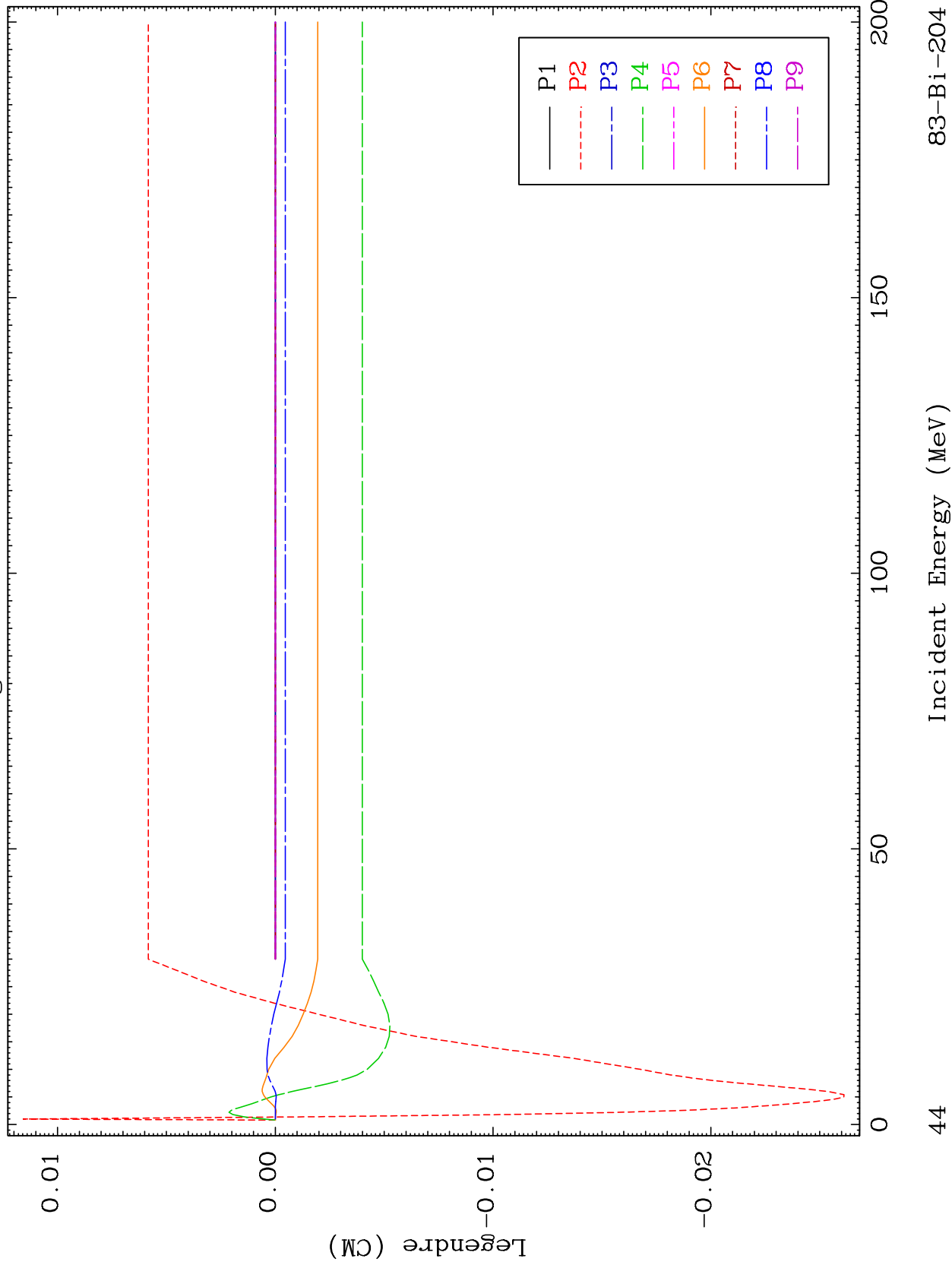
83-Bi-204



MAT 8310

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

83-Bi-204



83-Bi-204

Incident Energy (MeV)

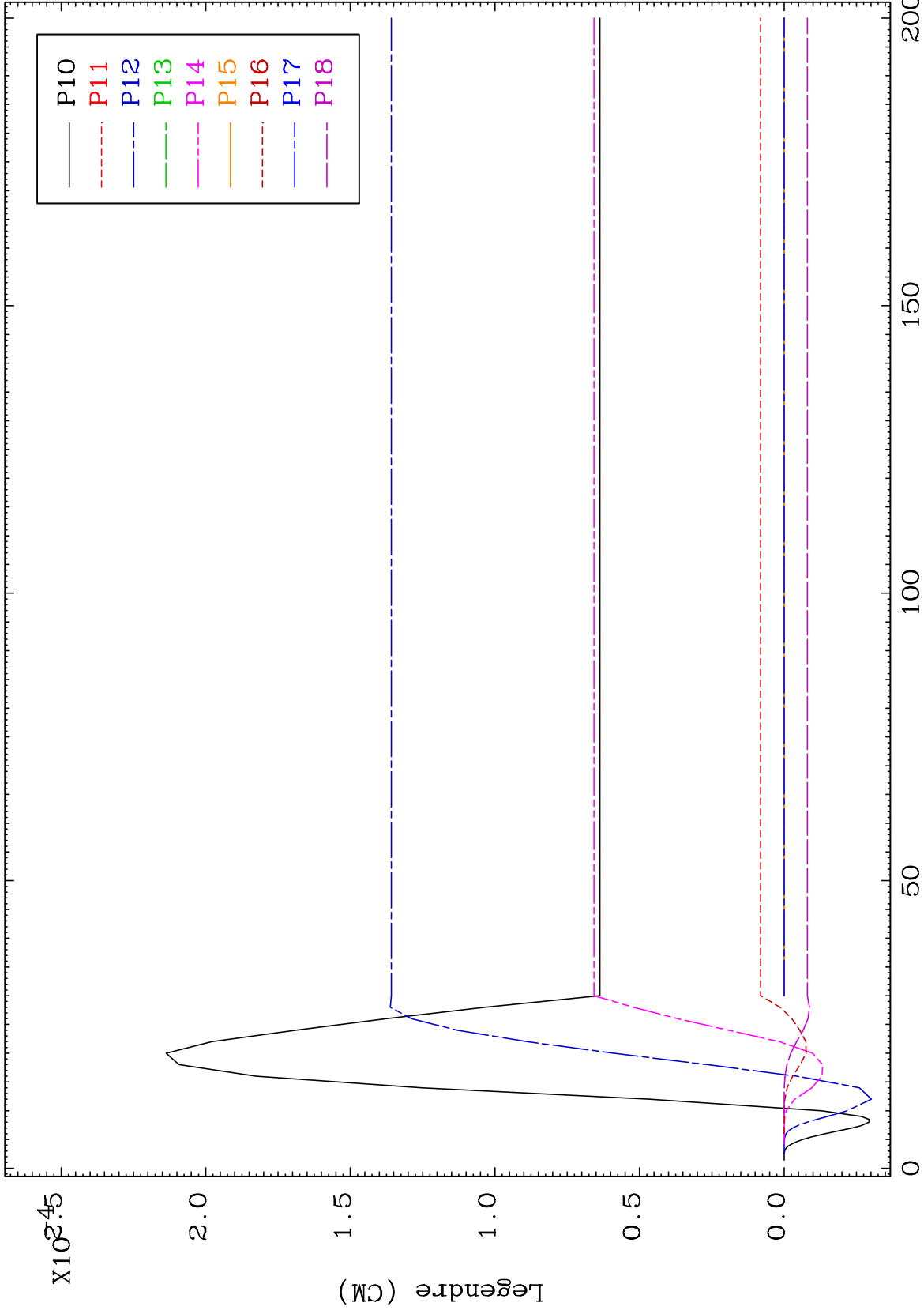
44

MAT 8310

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

83-Bi-204

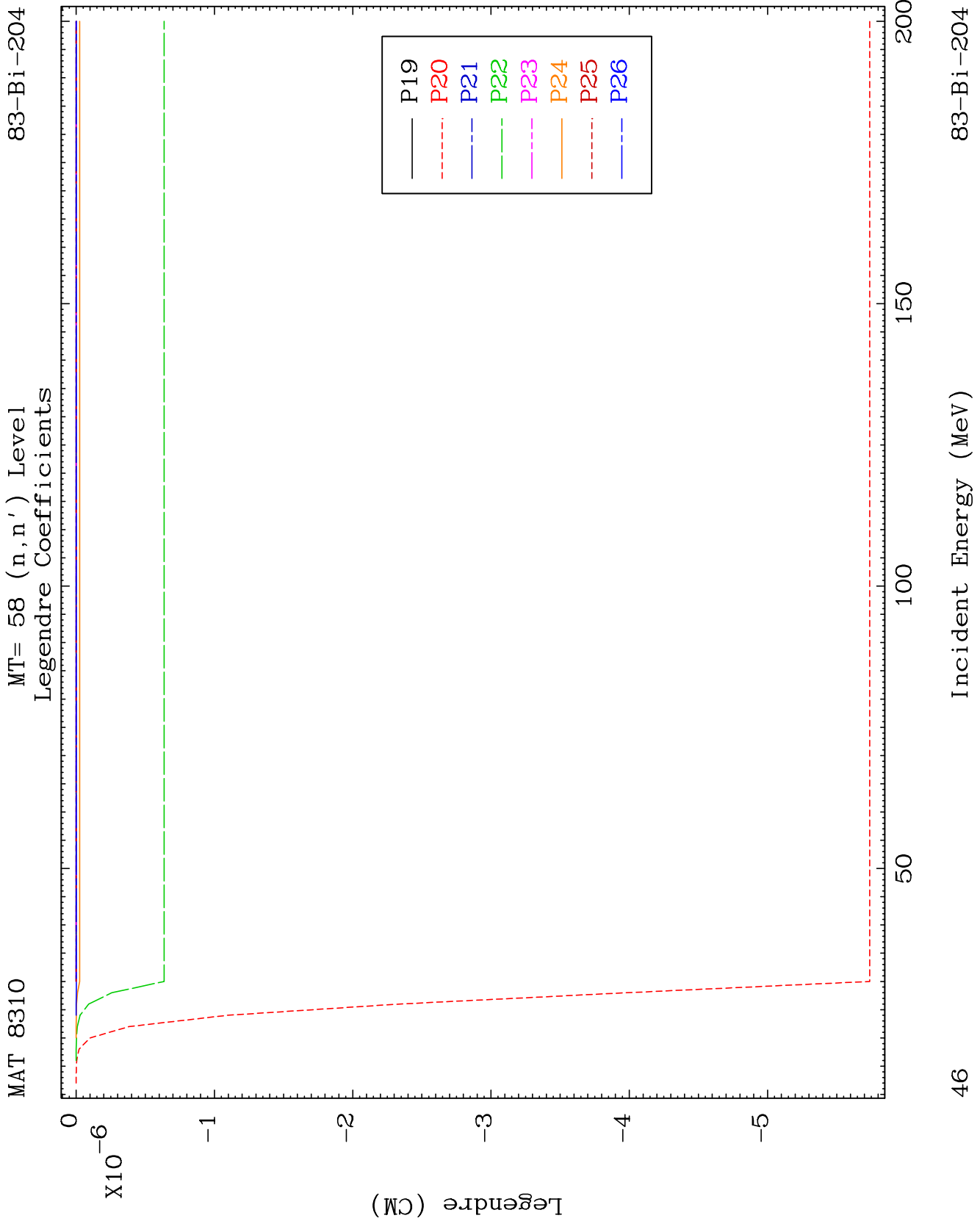
$\times 10^{-4}$



45

Incident Energy (MeV)

83-Bi-204



83-Bi-204

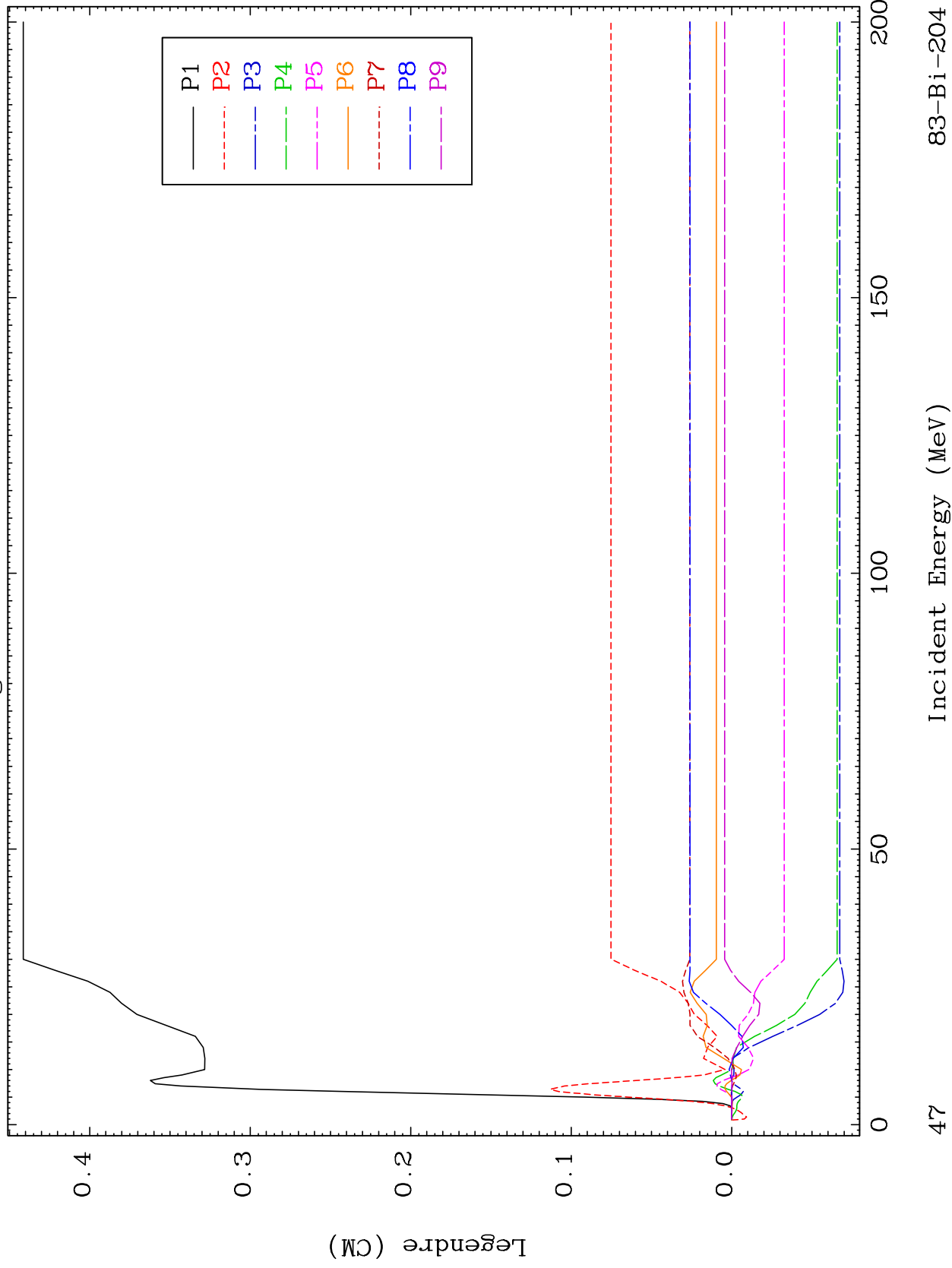
Incident Energy (MeV)

46

MAT 8310

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

83-Bi-204



47

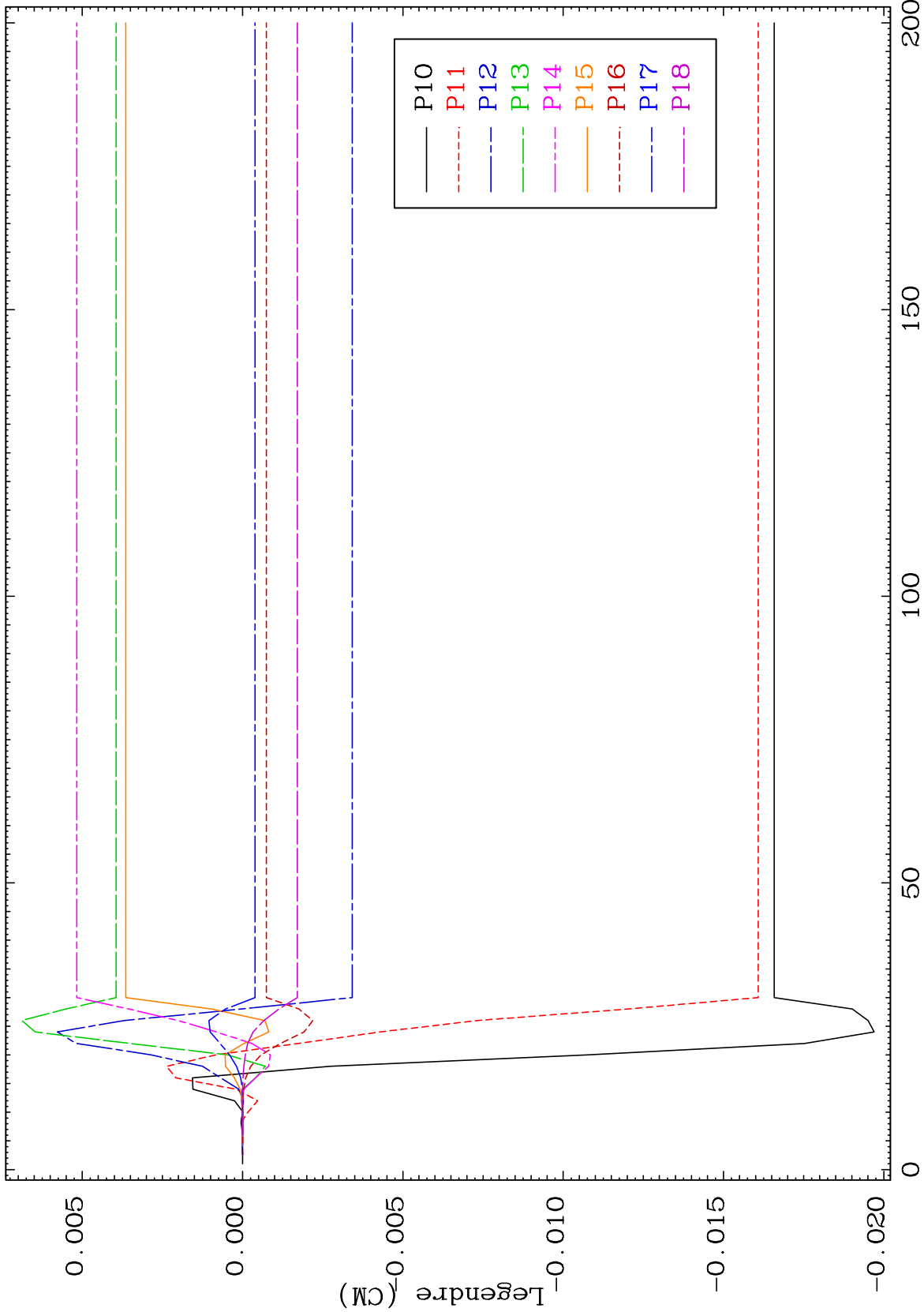
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

83-Bi-204



48

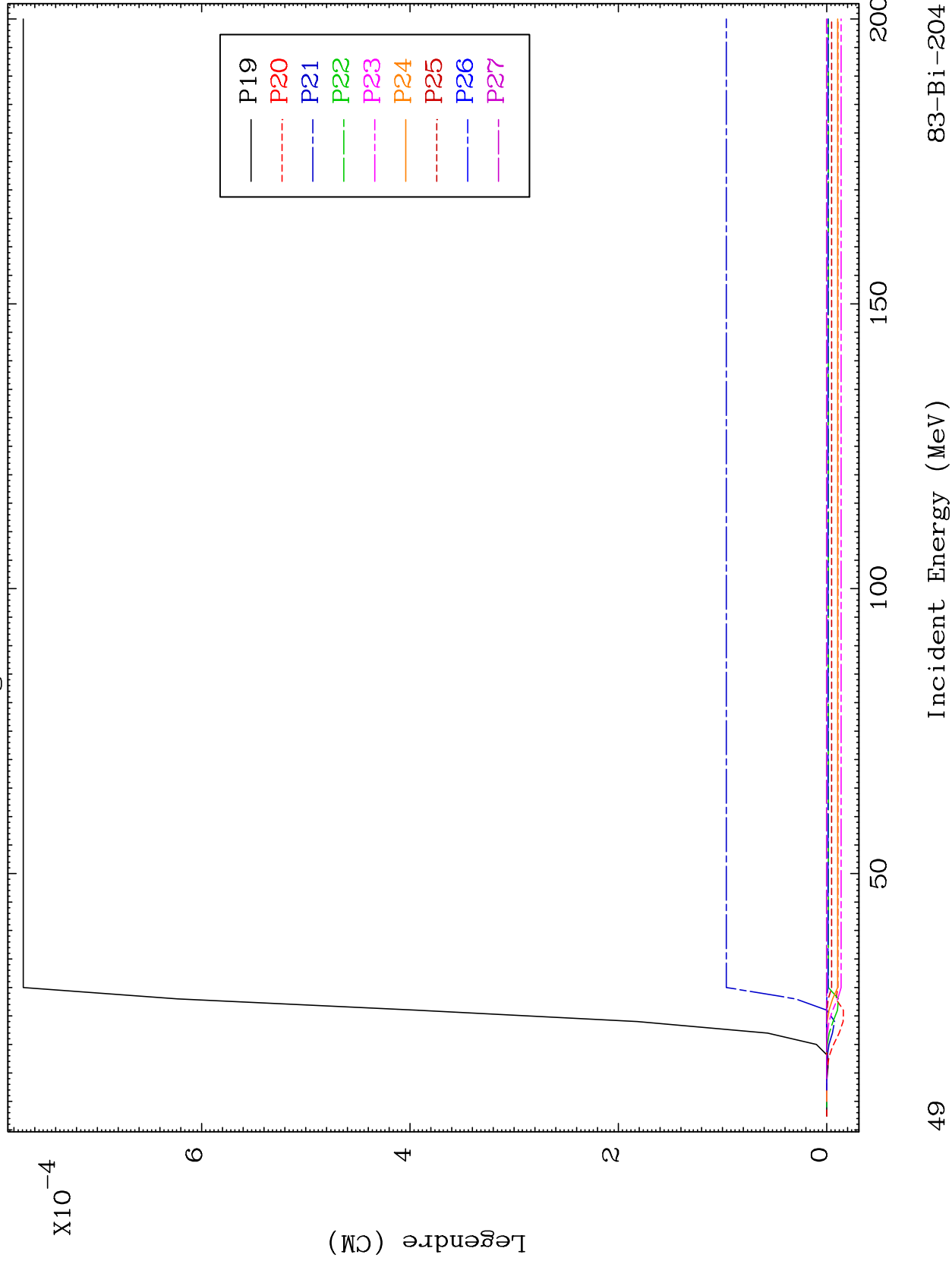
Incident Energy (MeV)

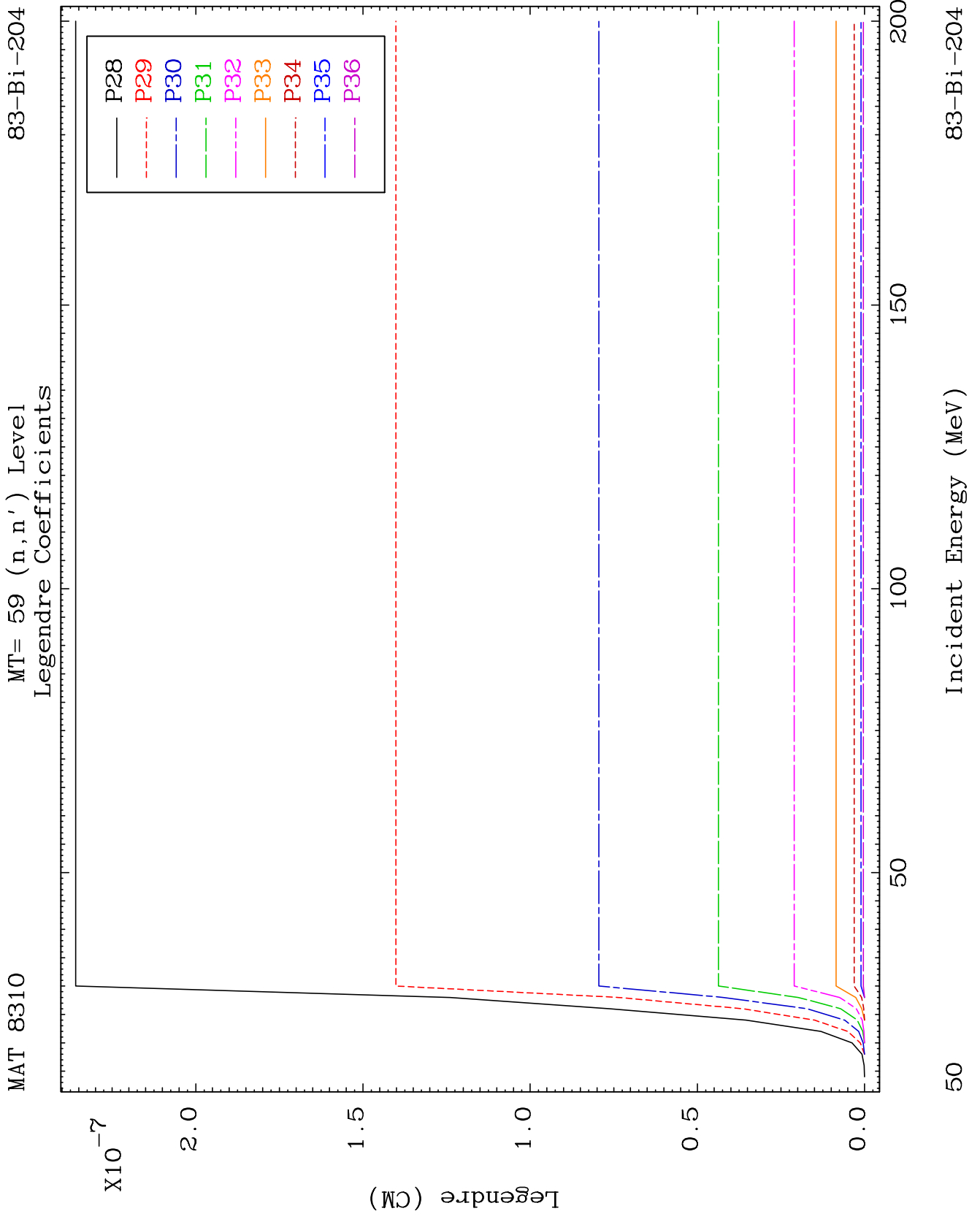
83-Bi-204

MAT 8310

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

83-Bi-204

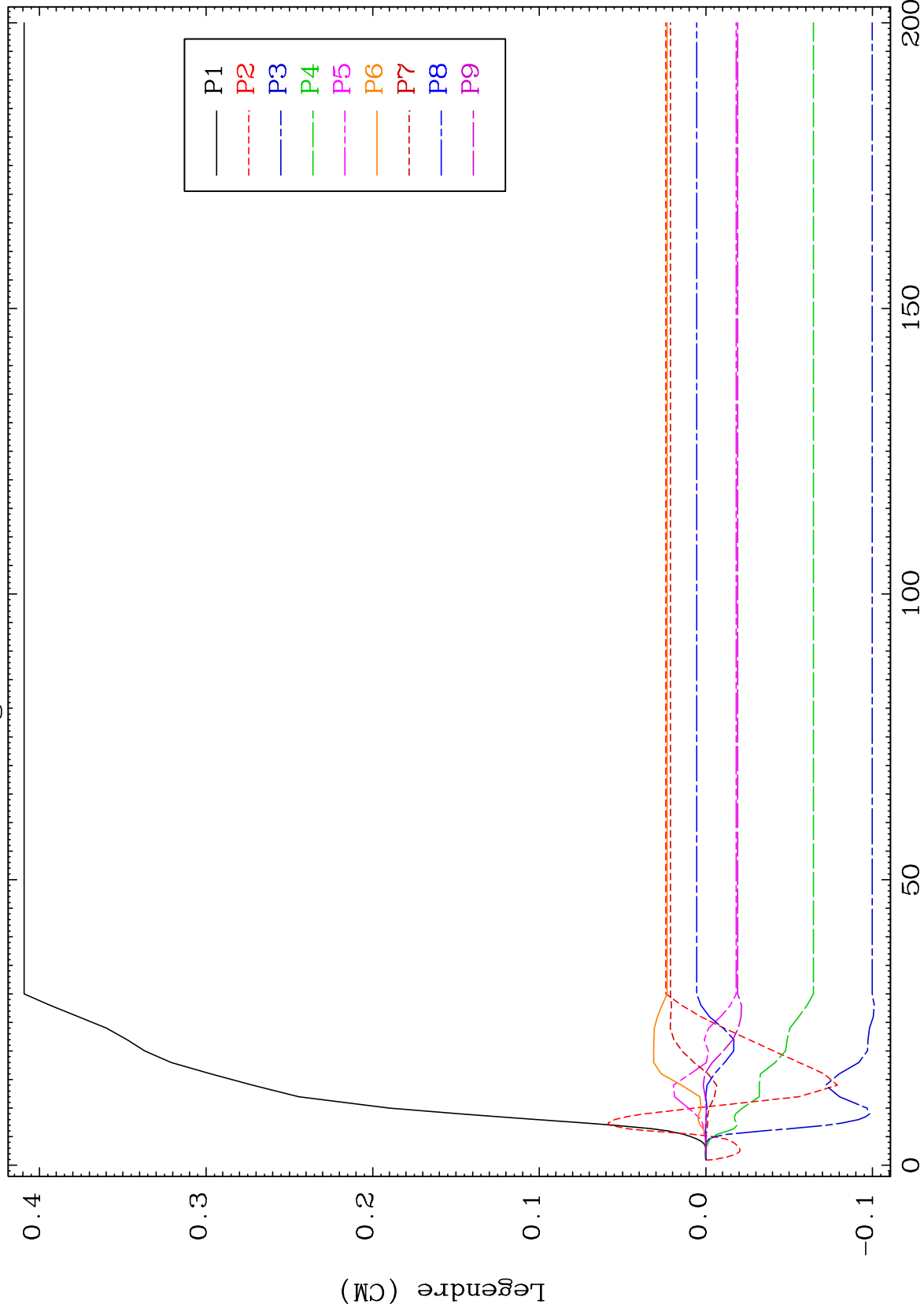




MAT 8310

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

83-Bi-204



51

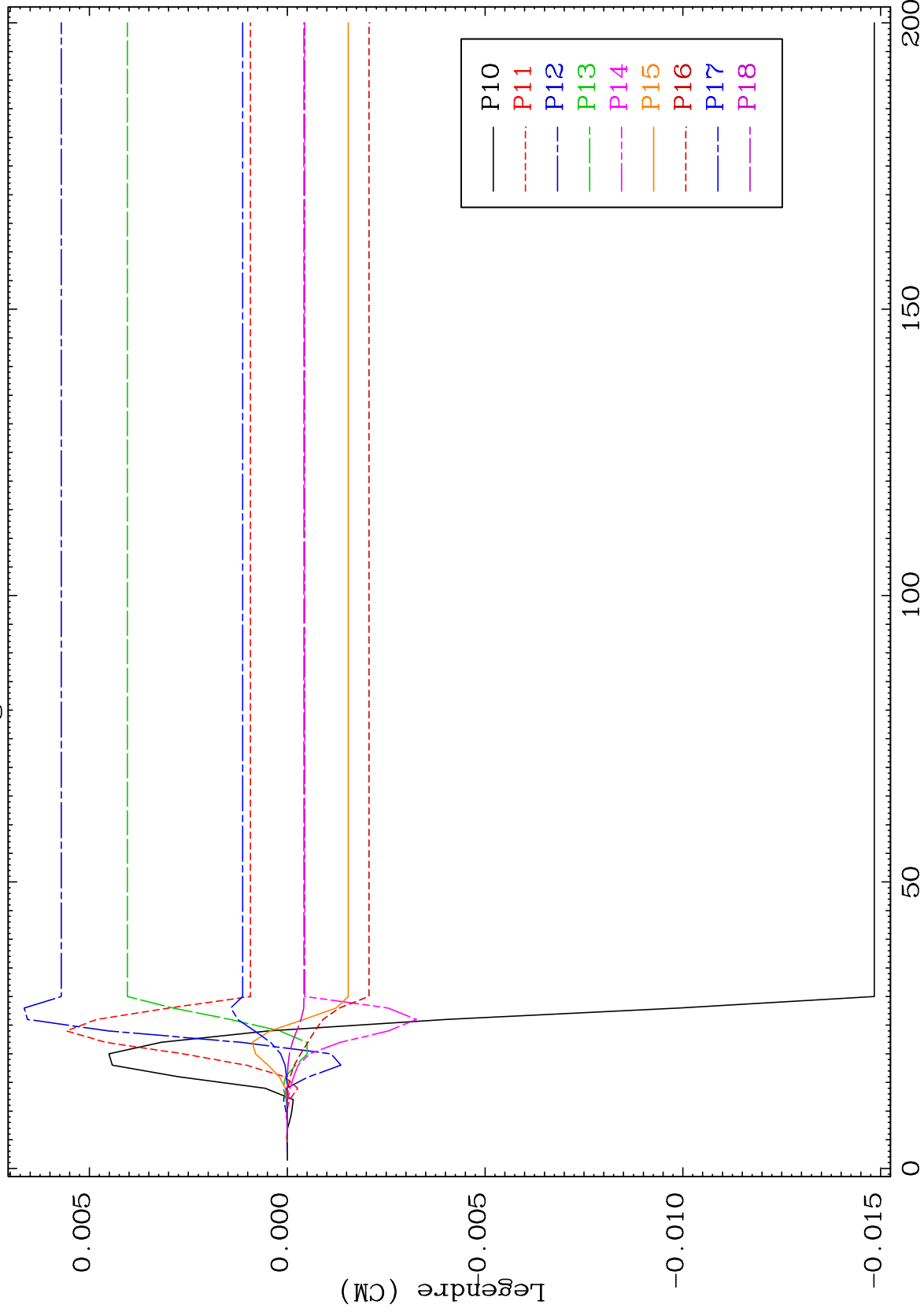
Incident Energy (MeV)

83-Bi-204

MAT 8310

83-Bi-204

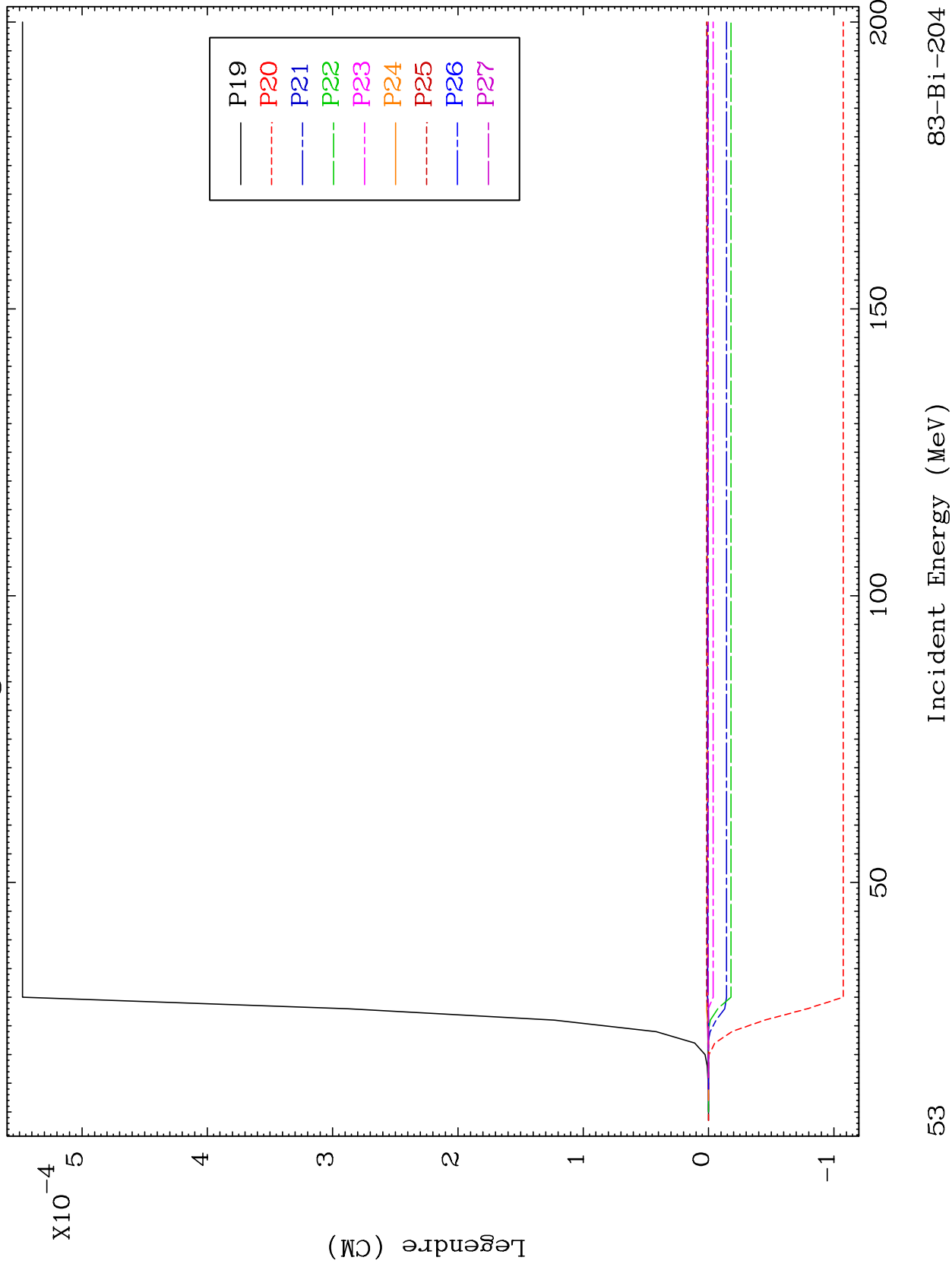
MT= 60 (n,n') Level
Legendre Coefficients



MAT 8310

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

83-Bi-204



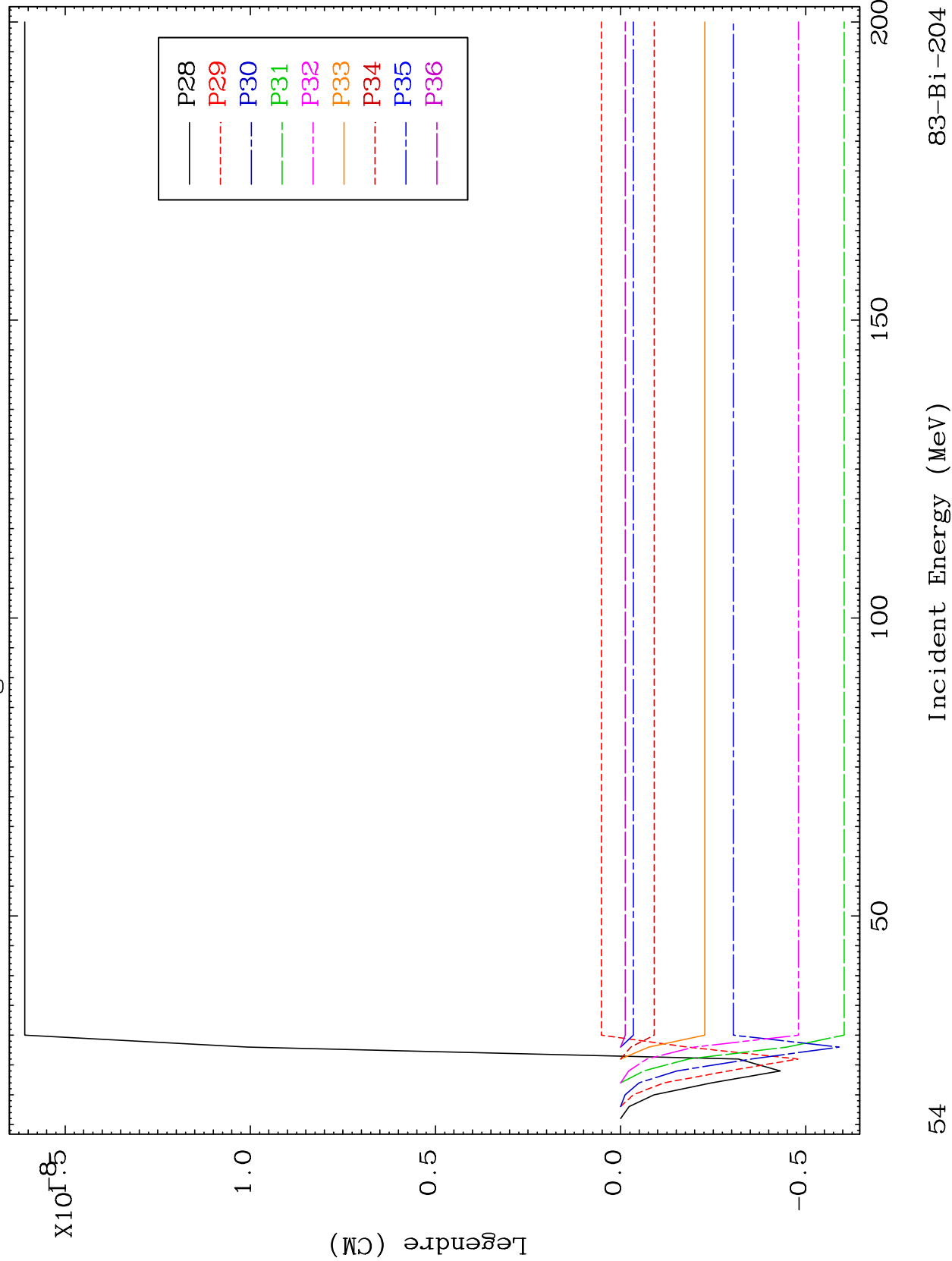
53

83-Bi-204

MAT 8310

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

83-Bi-204



54

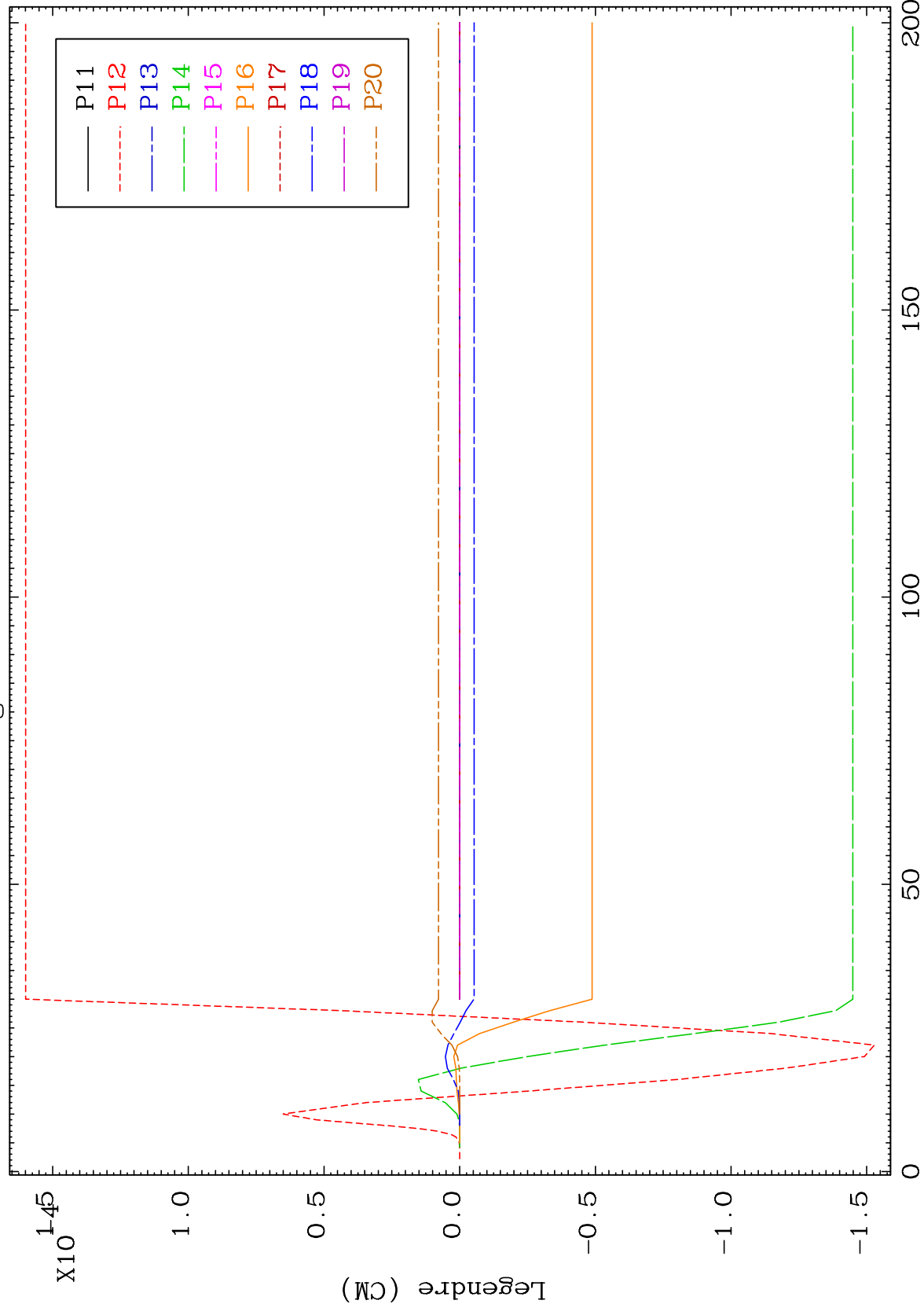
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

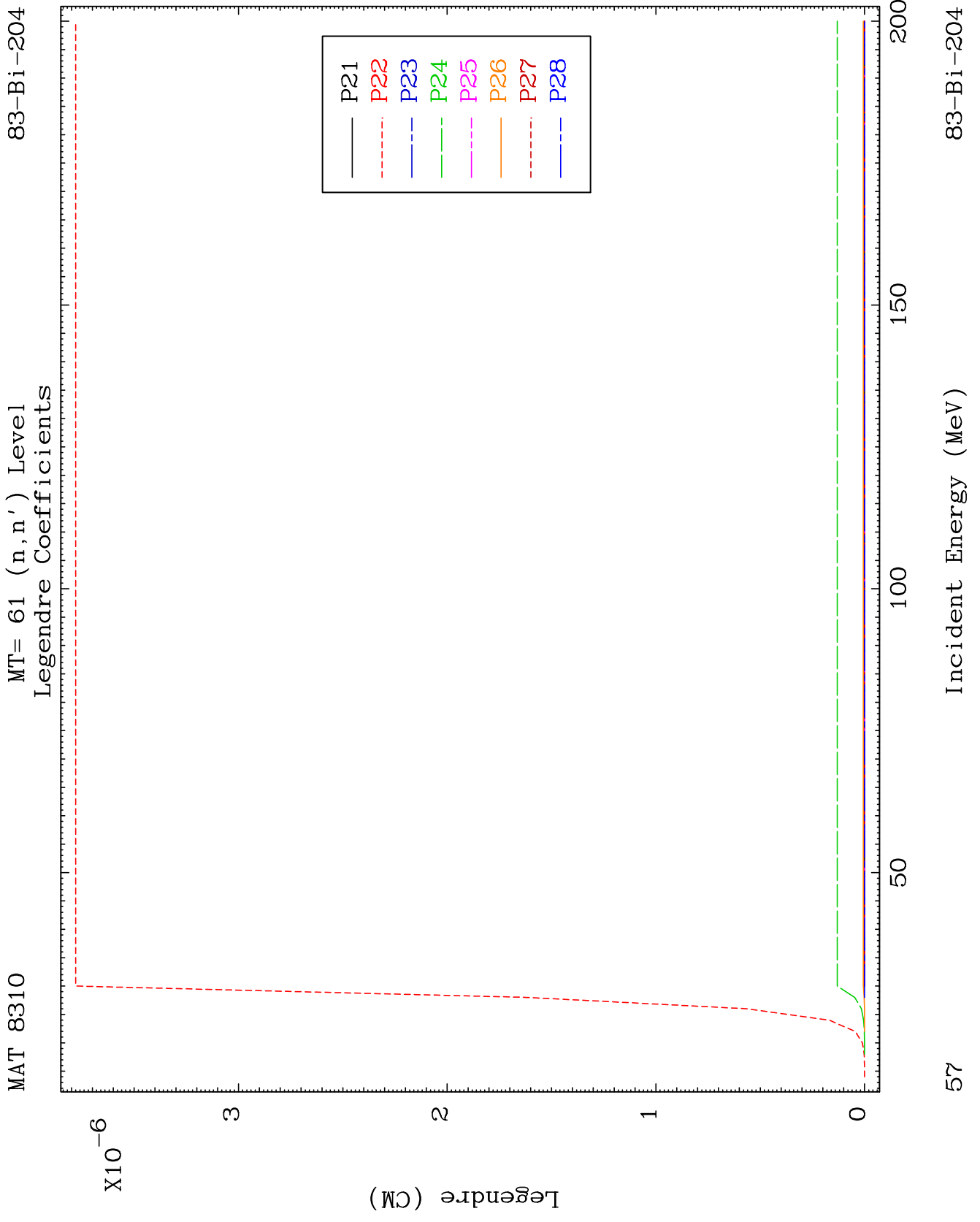
83-Bi-204

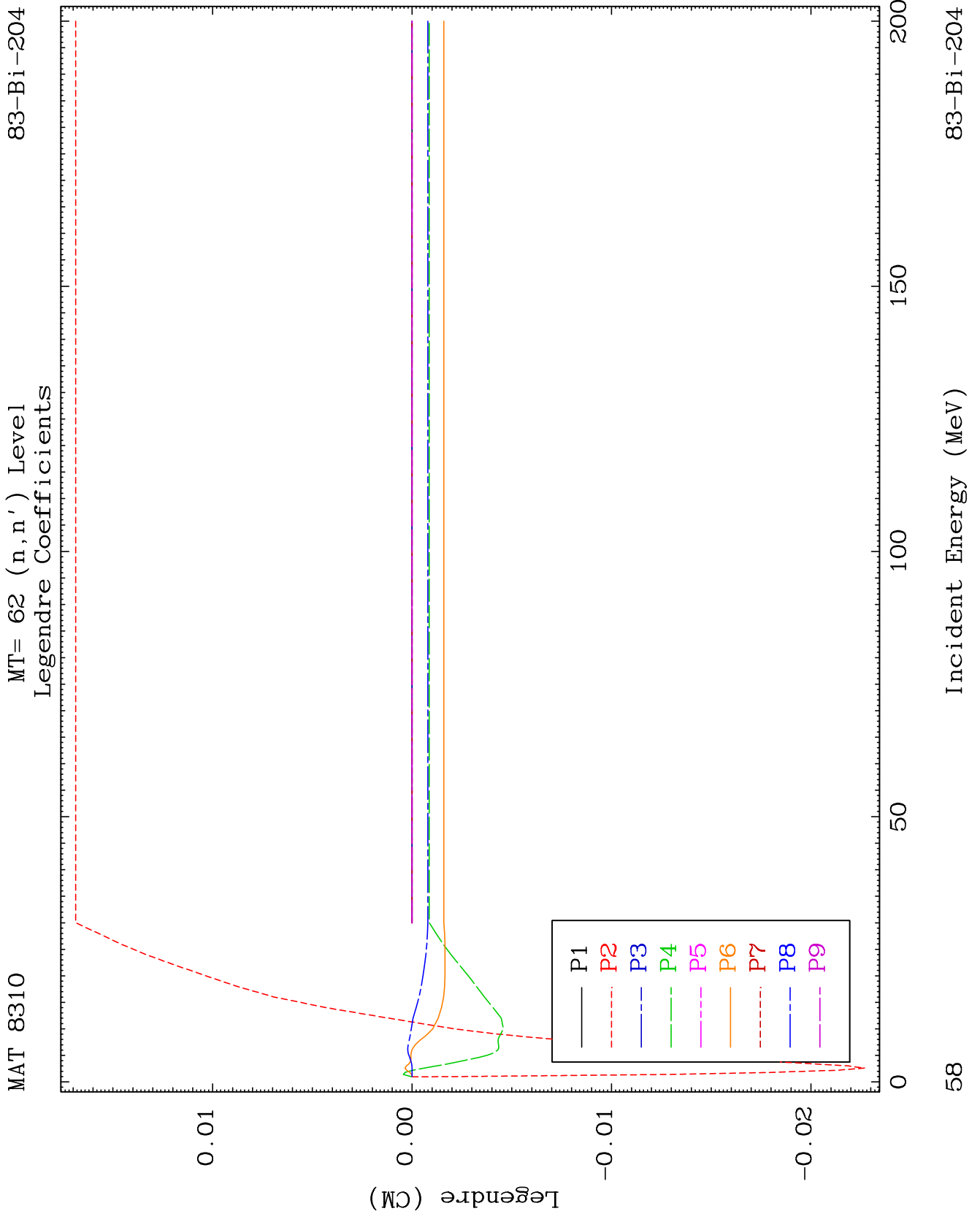


56

Incident Energy (MeV)

83-Bi-204

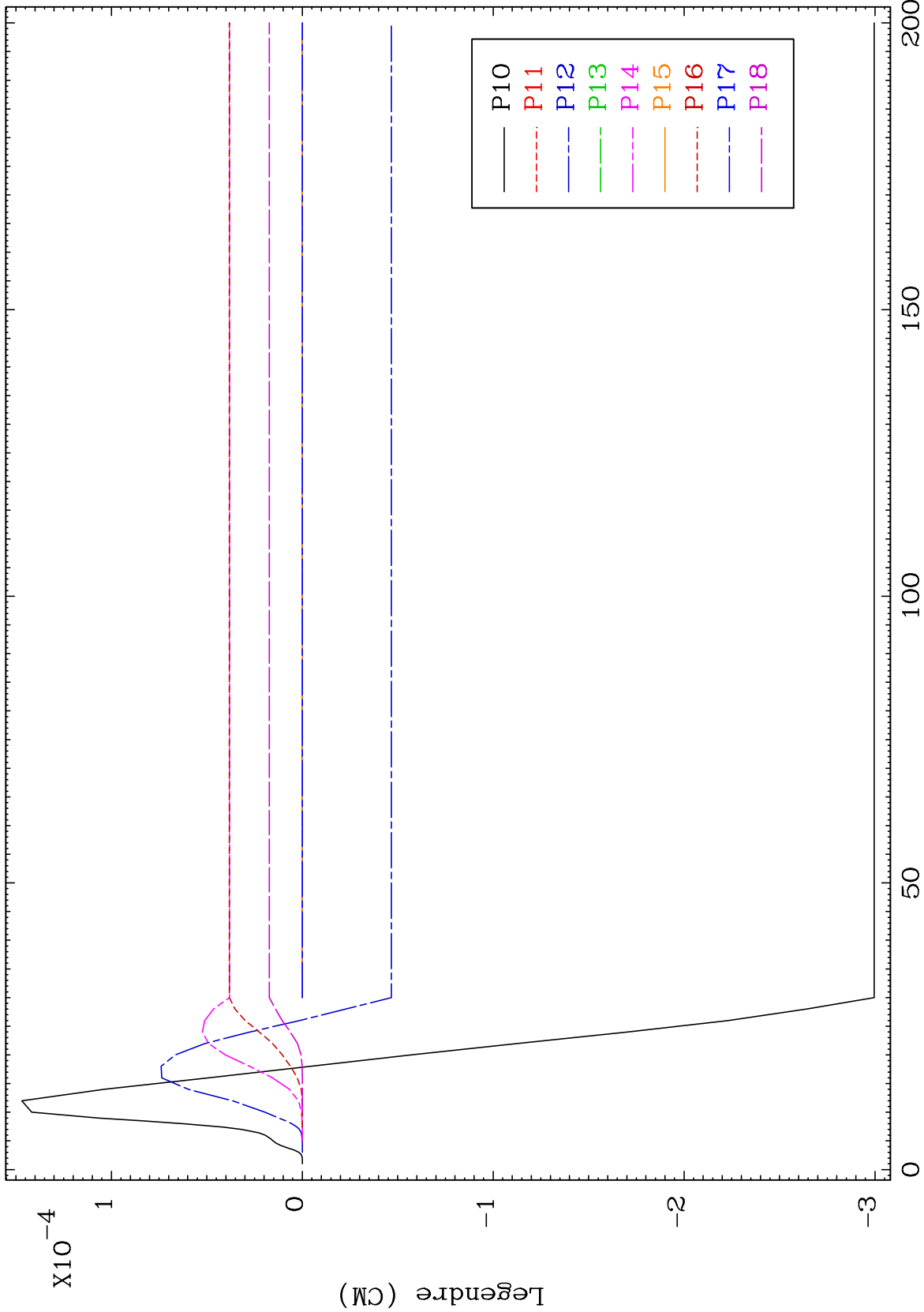




MAT 8310

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

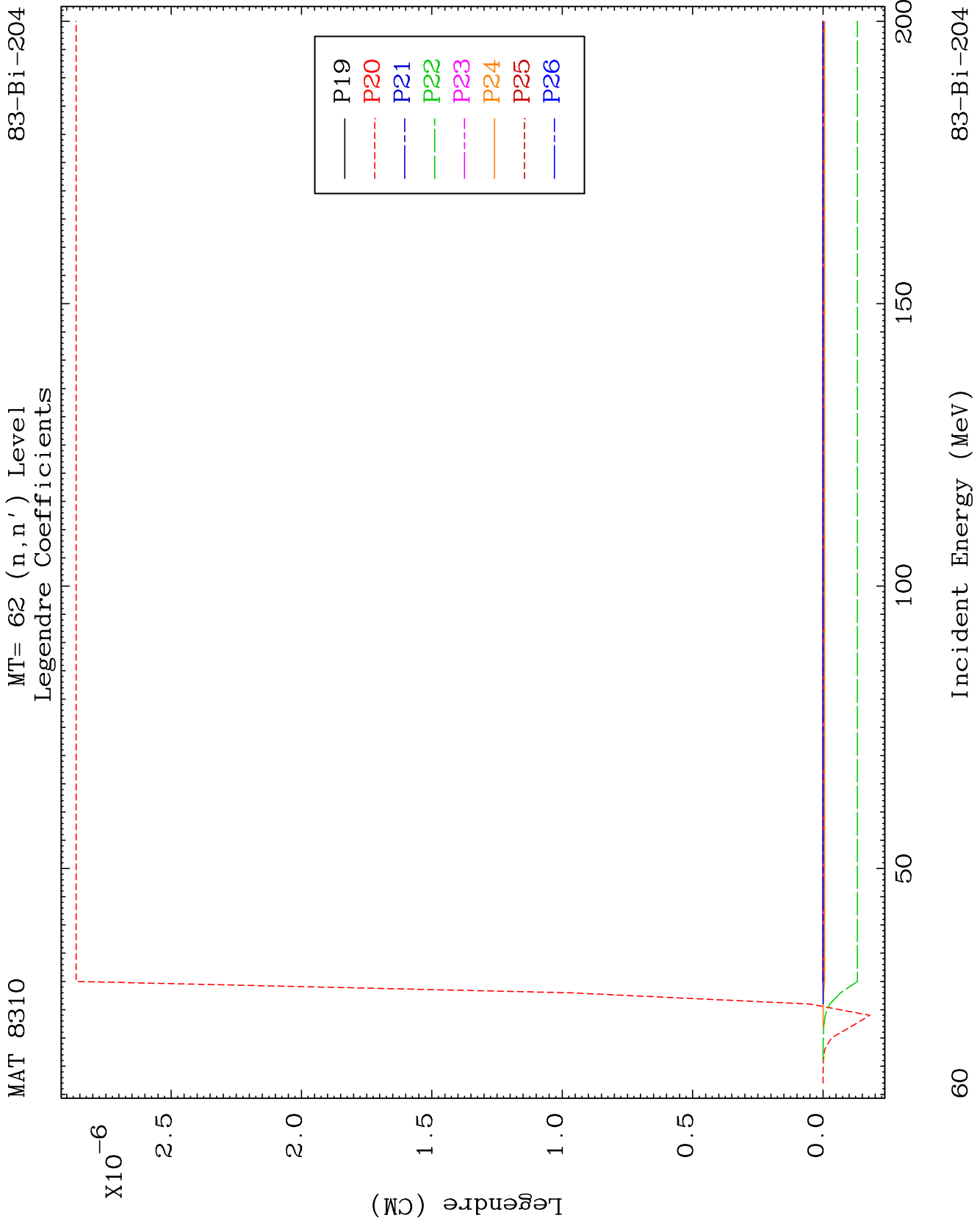
83-Bi-204



59

Incident Energy (MeV)

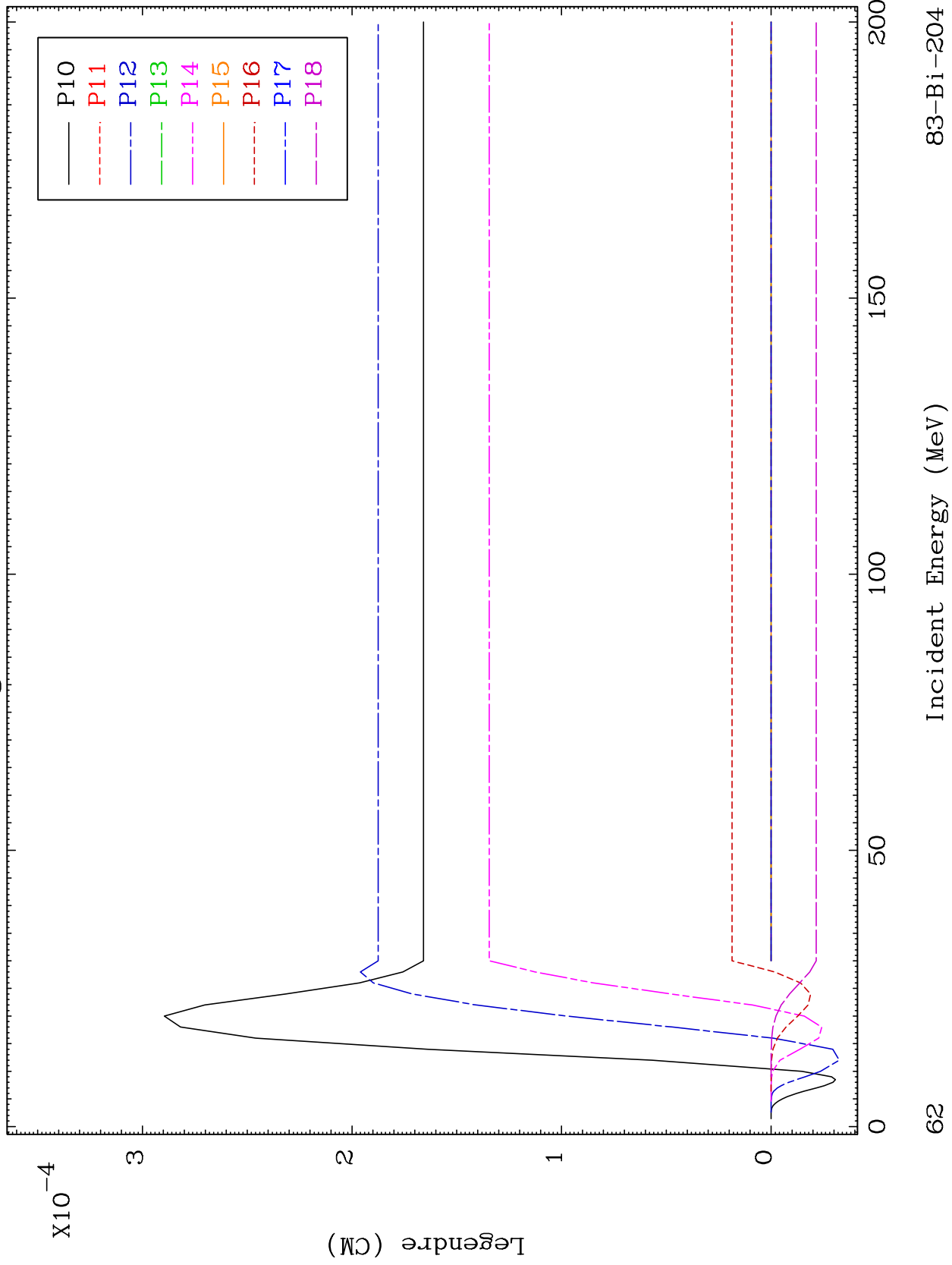
83-Bi-204

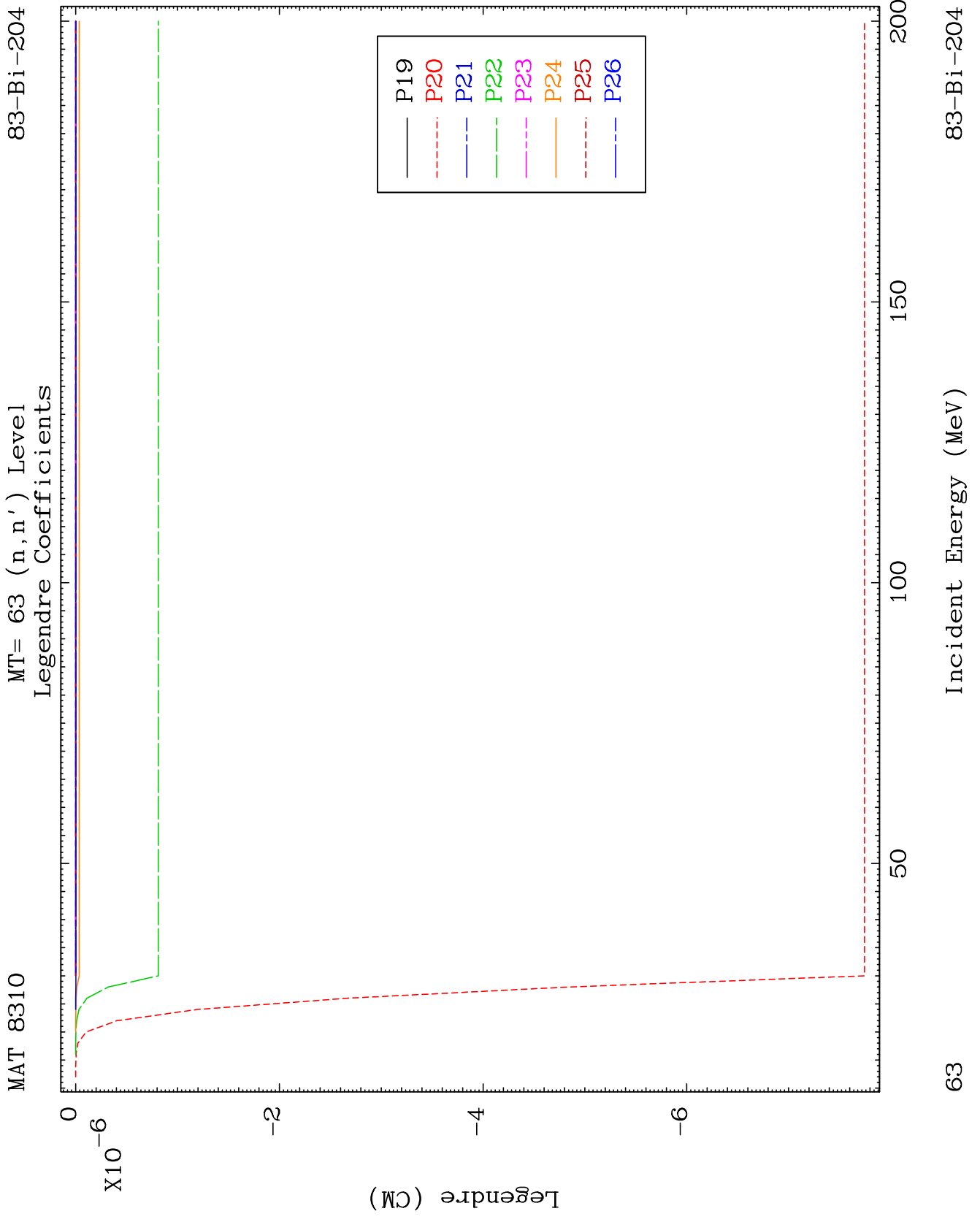


MAT 8310

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

83-Bi-204

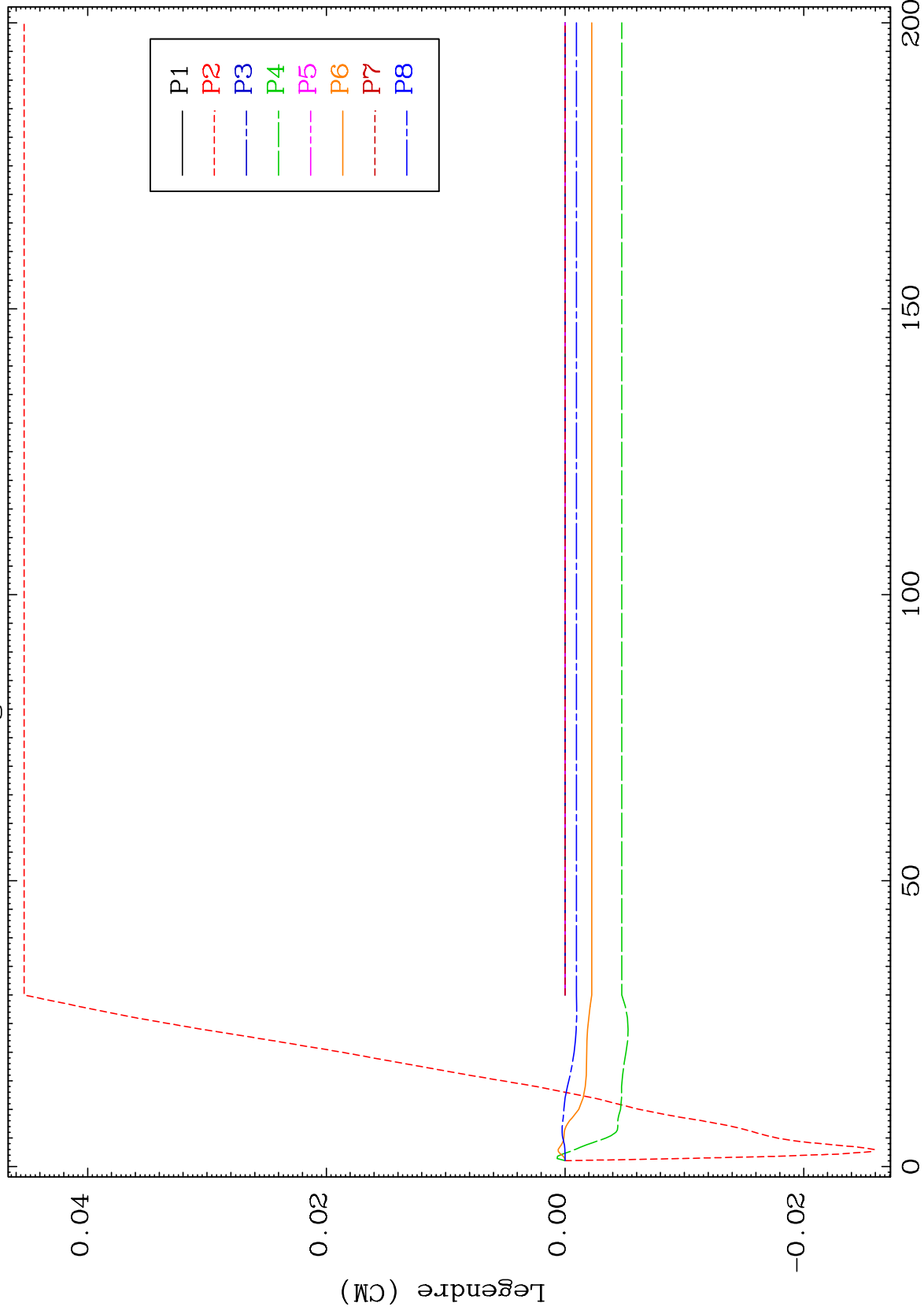




MAT 8310

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

83-Bi-204



64

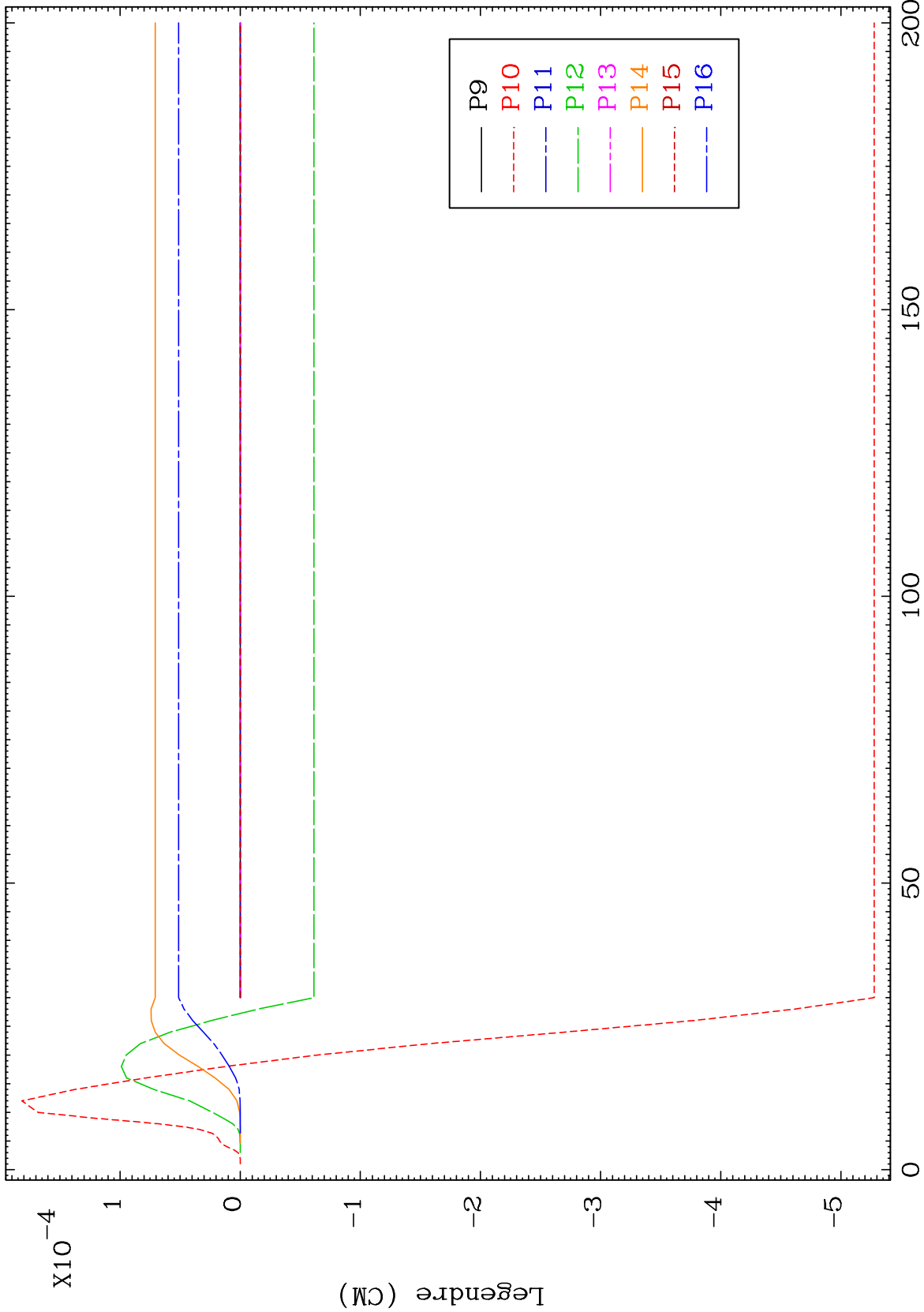
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

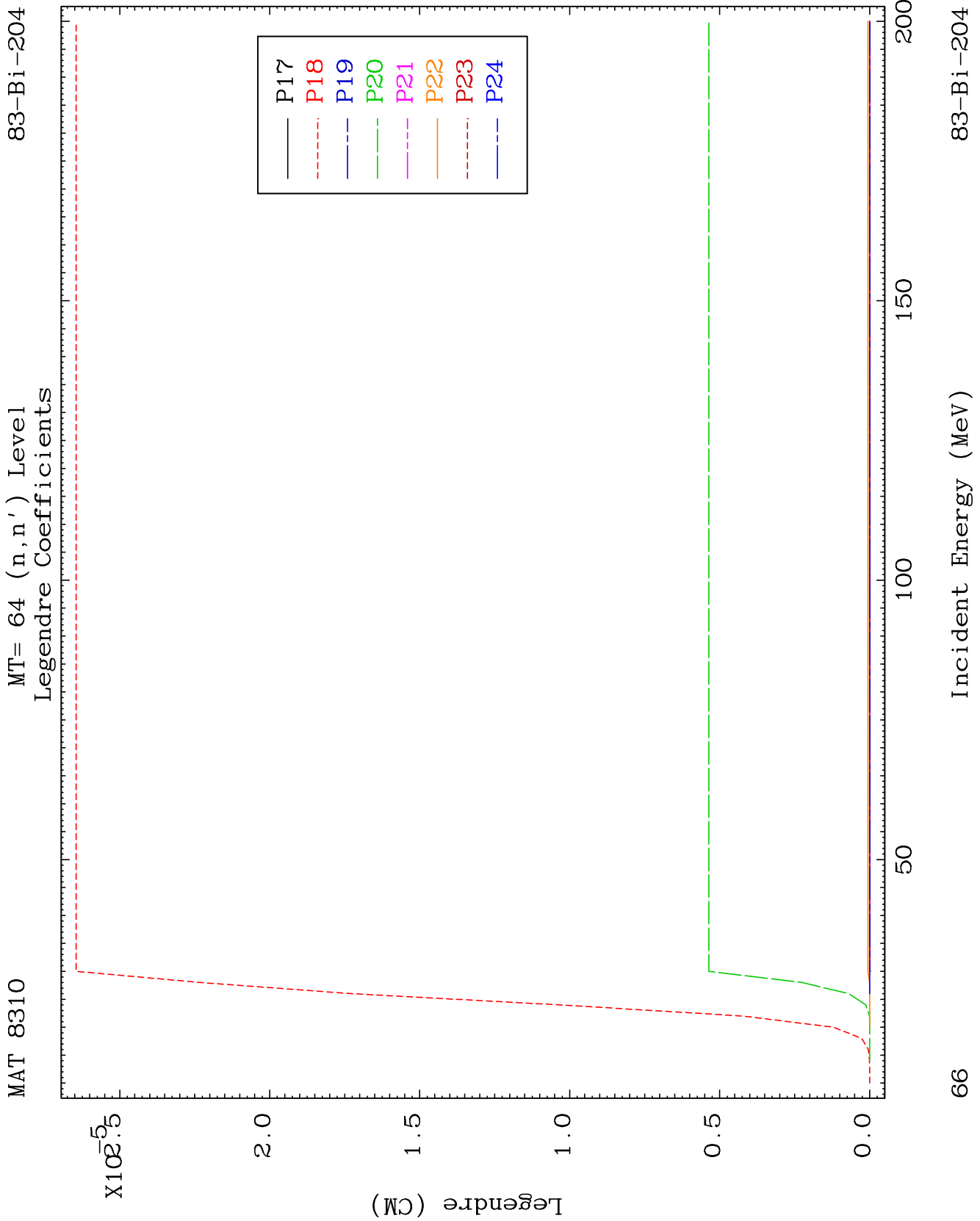
83-Bi-204



65

Incident Energy (MeV)

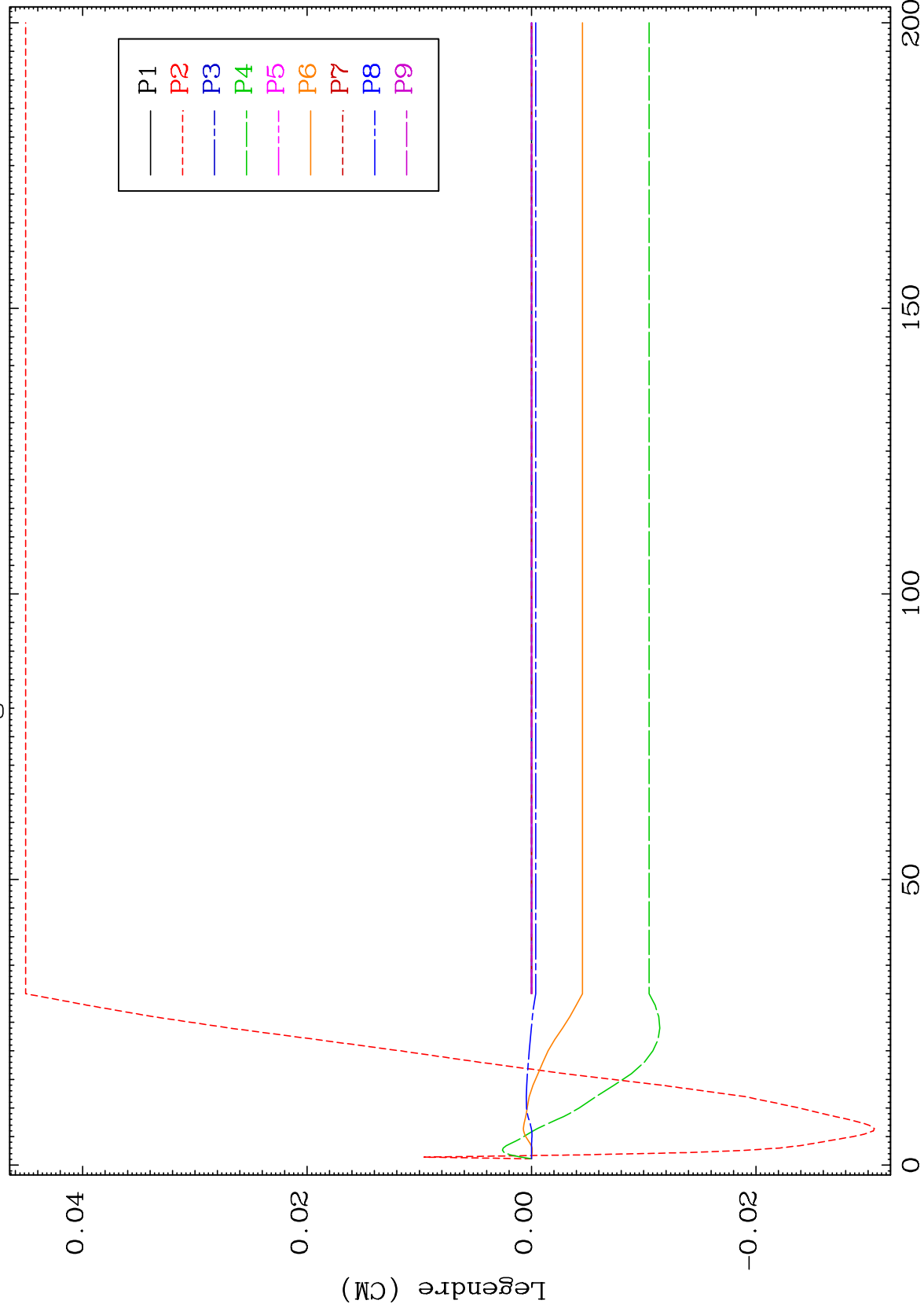
83-Bi-204



MAT 8310

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

83-Bi-204



83-Bi-204

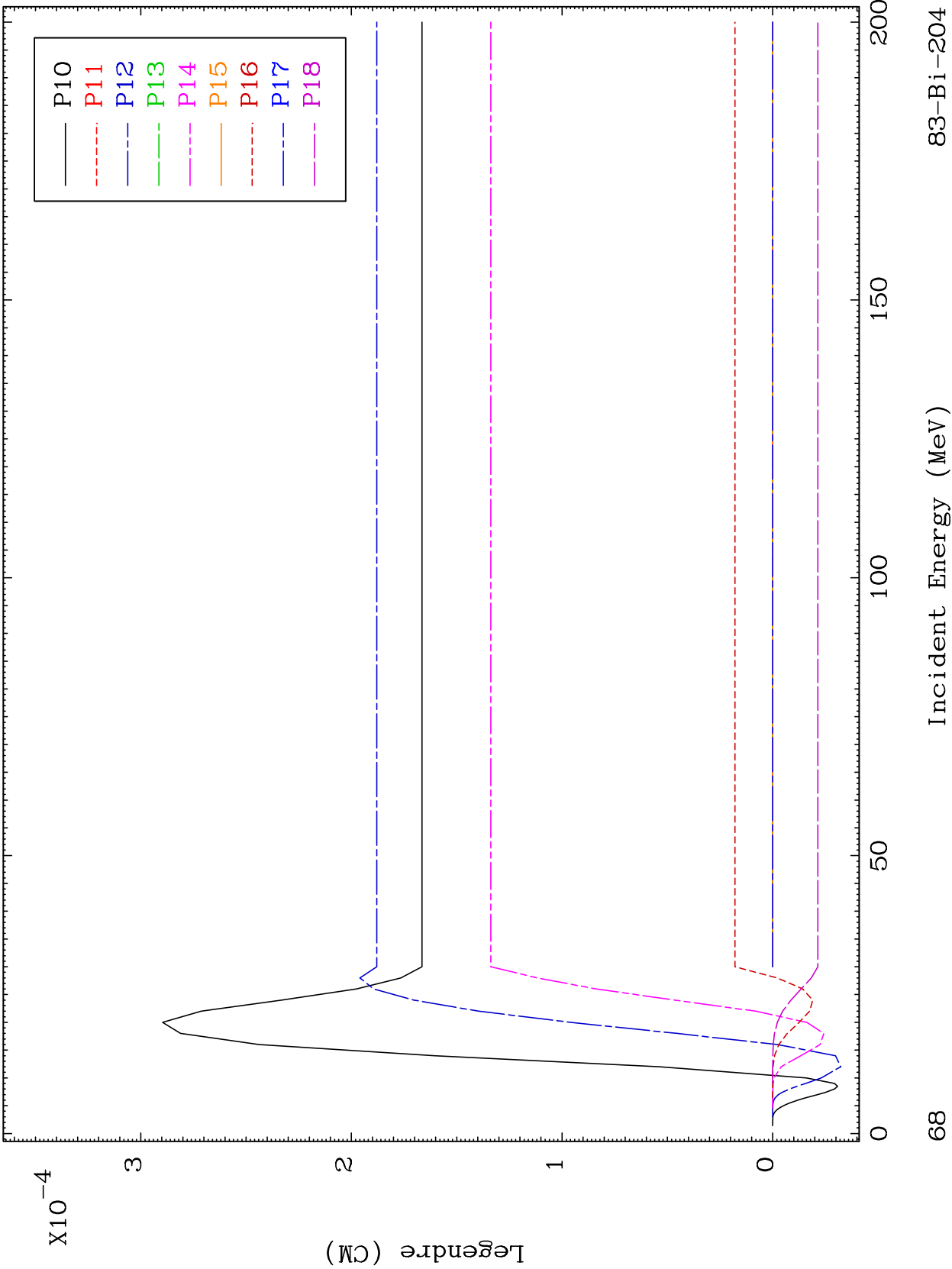
Incident Energy (MeV)

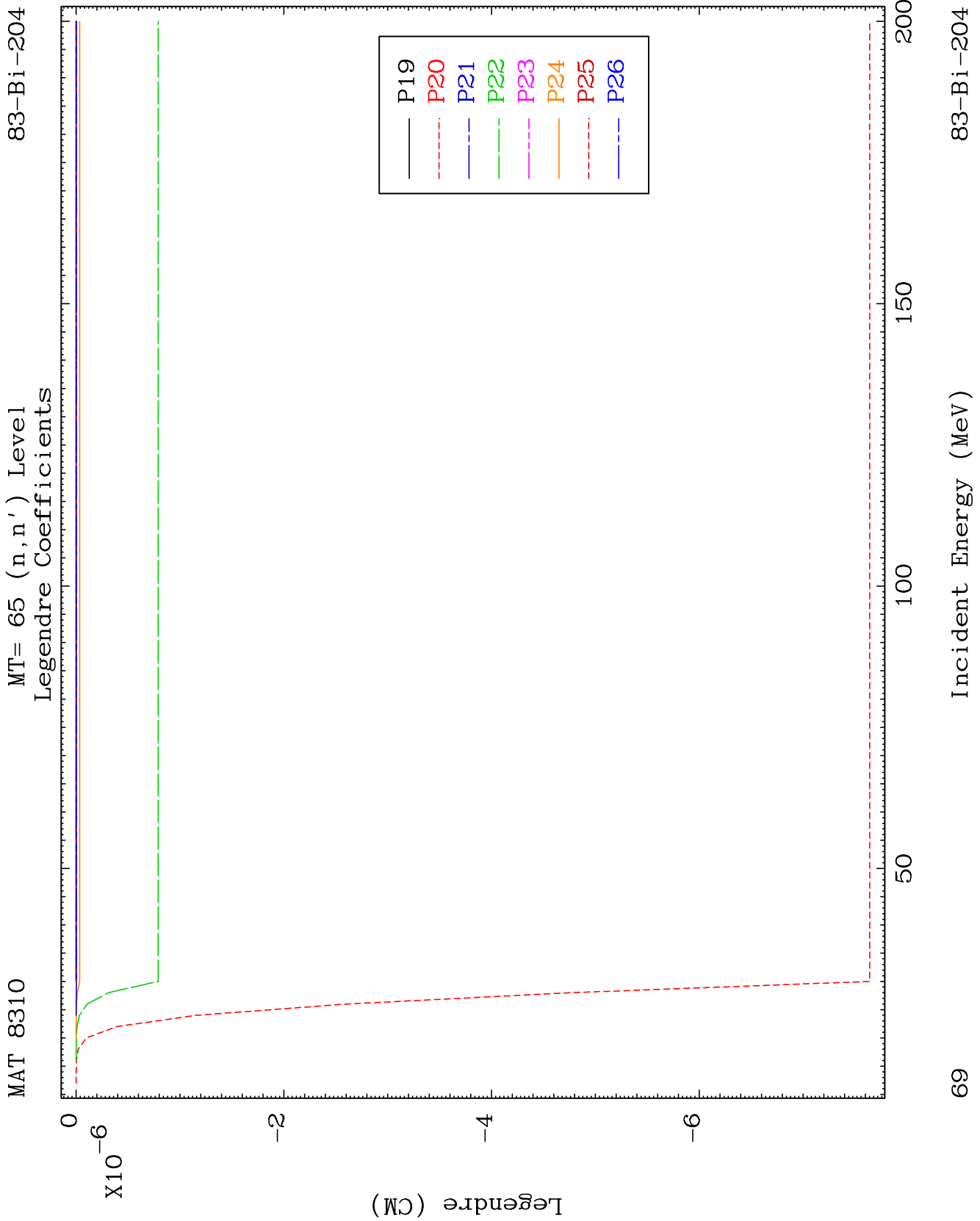
67

MAT 8310

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

83-Bi-204

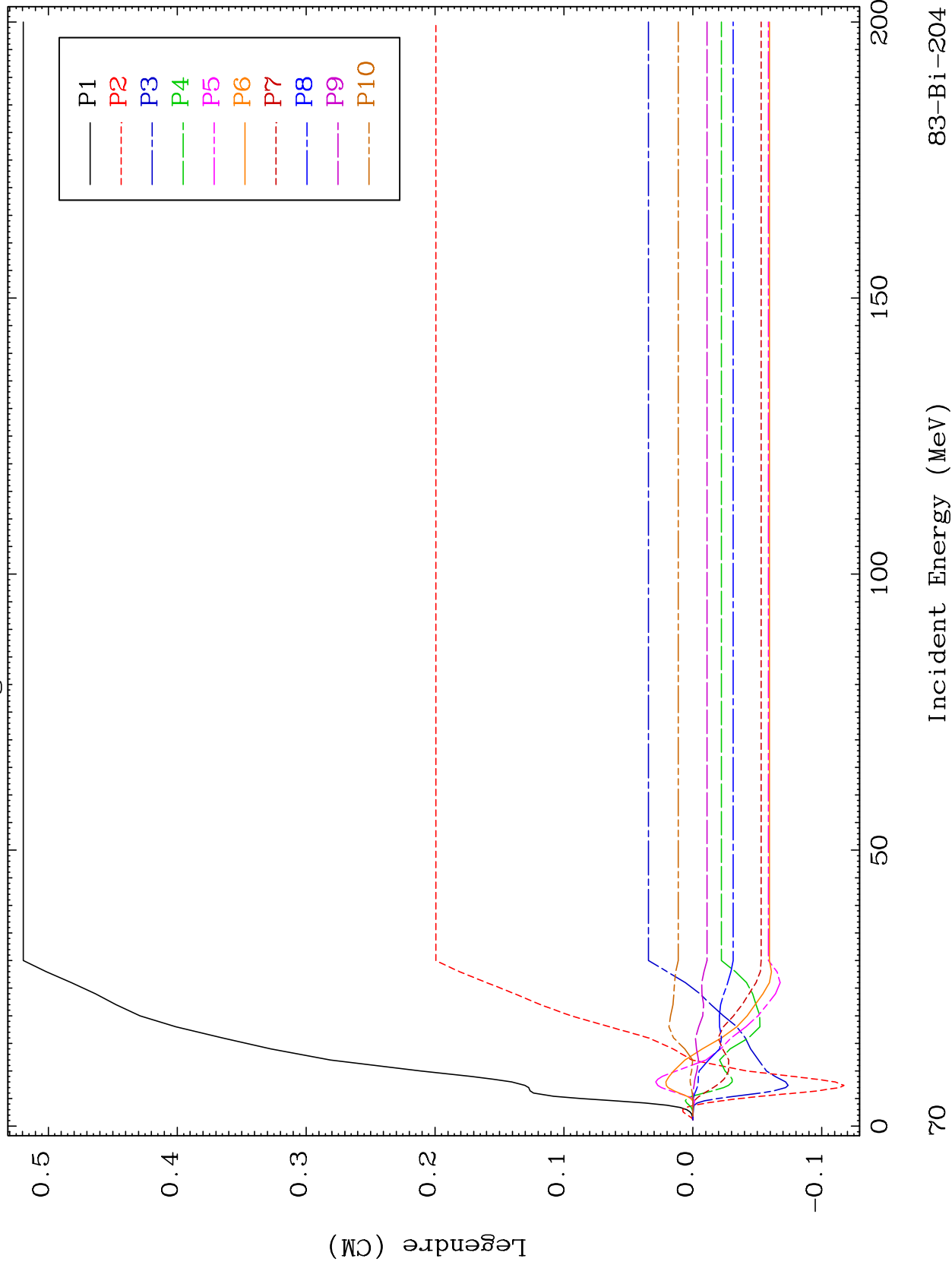




MAT 8310

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

83-Bi-204



83-Bi-204

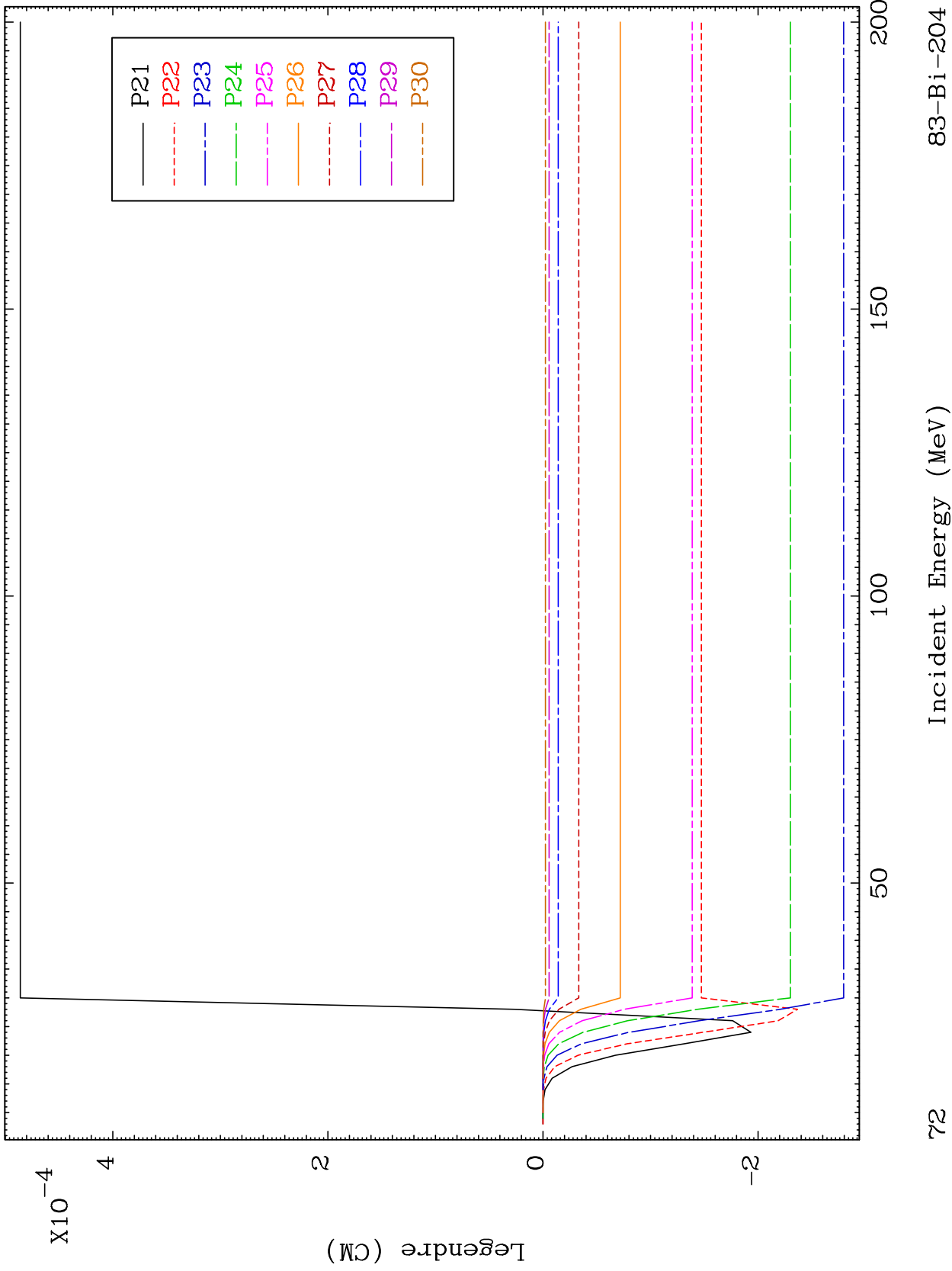
Incident Energy (MeV)

70

MAT 8310

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

83-Bi-204



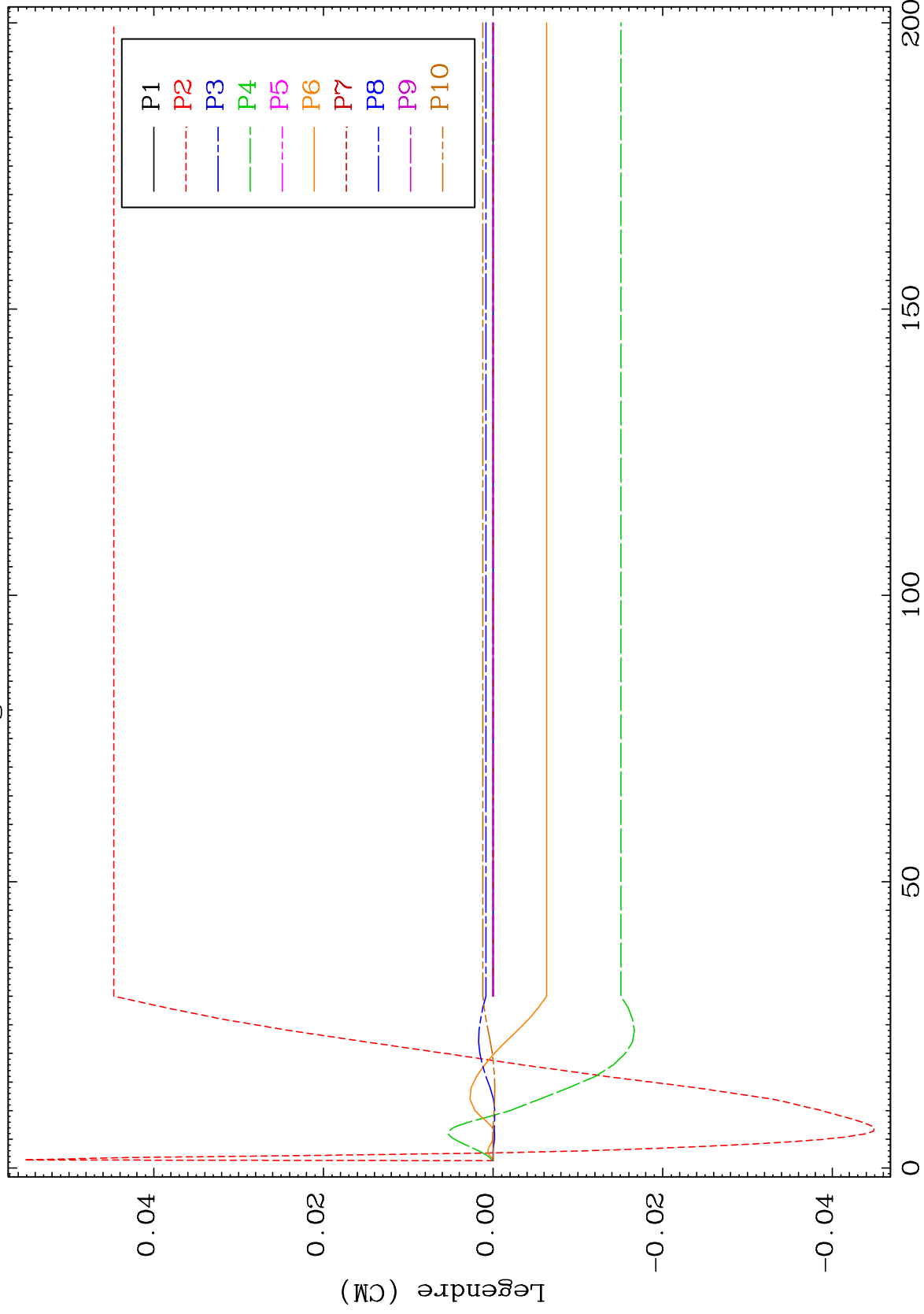
72

83-Bi-204

MAT 8310

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

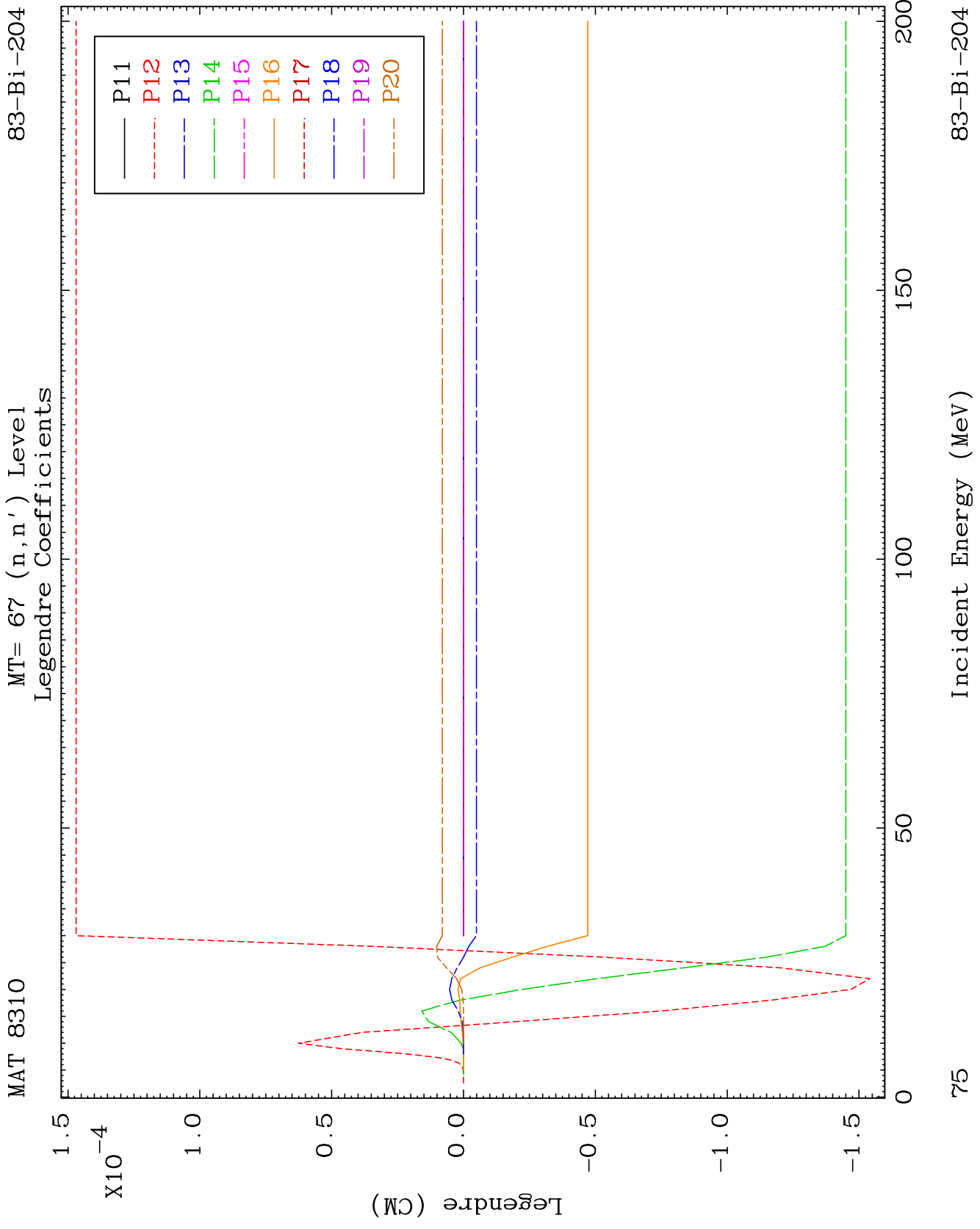
83-Bi-204



74

Incident Energy (MeV)

83-Bi-204



83-Bi-204

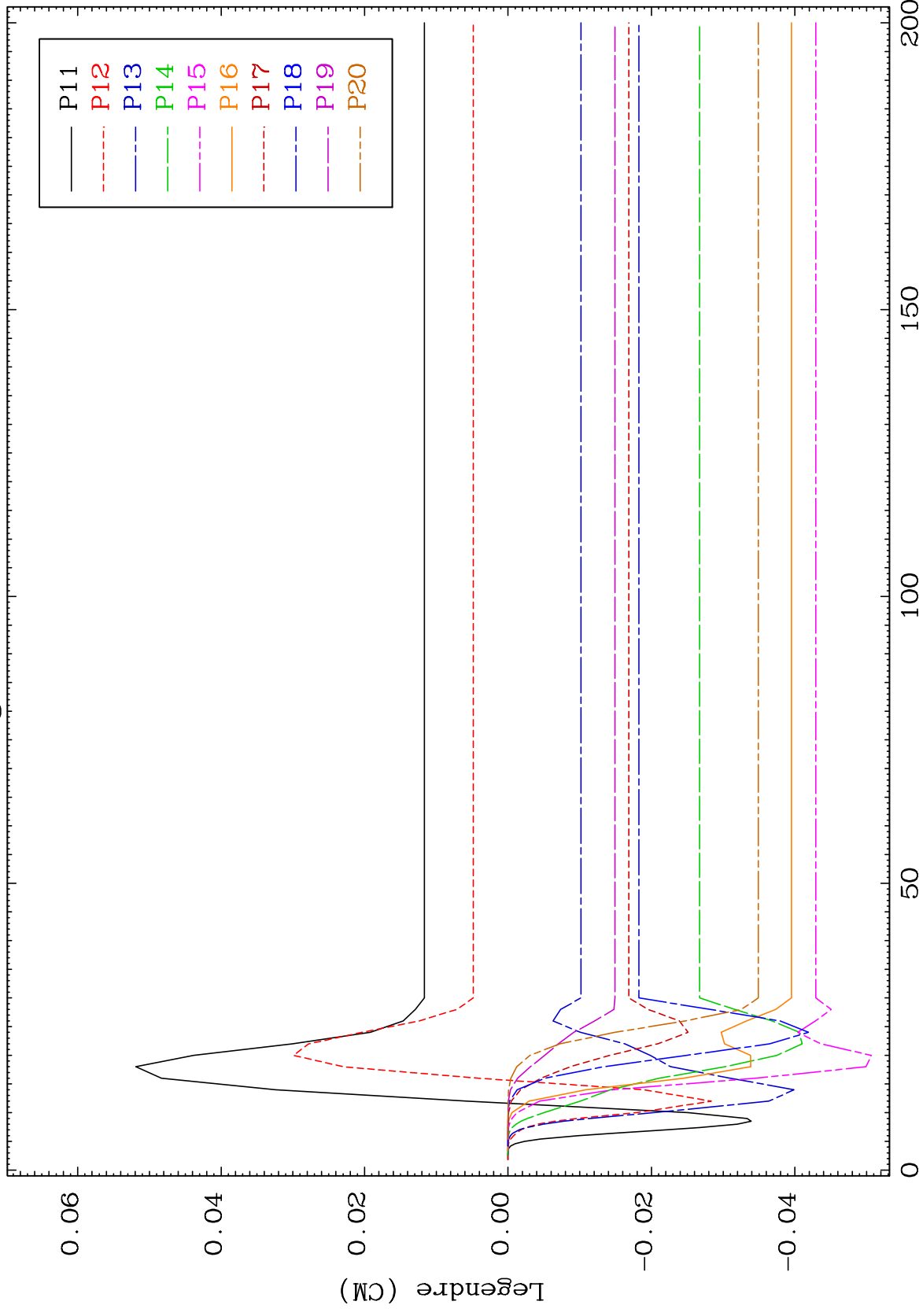
Incident Energy (MeV)

75

MAT 8310

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

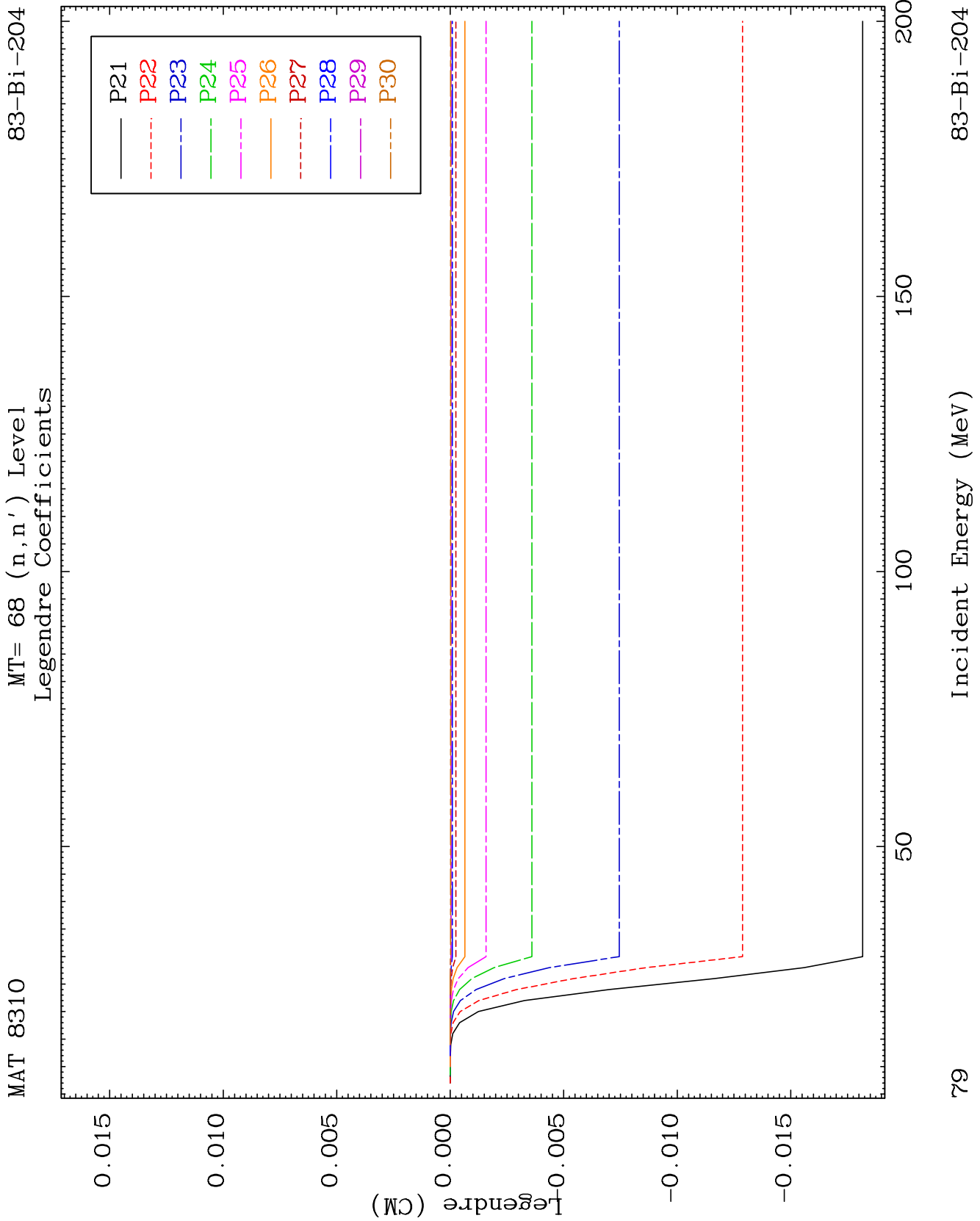
83-Bi-204

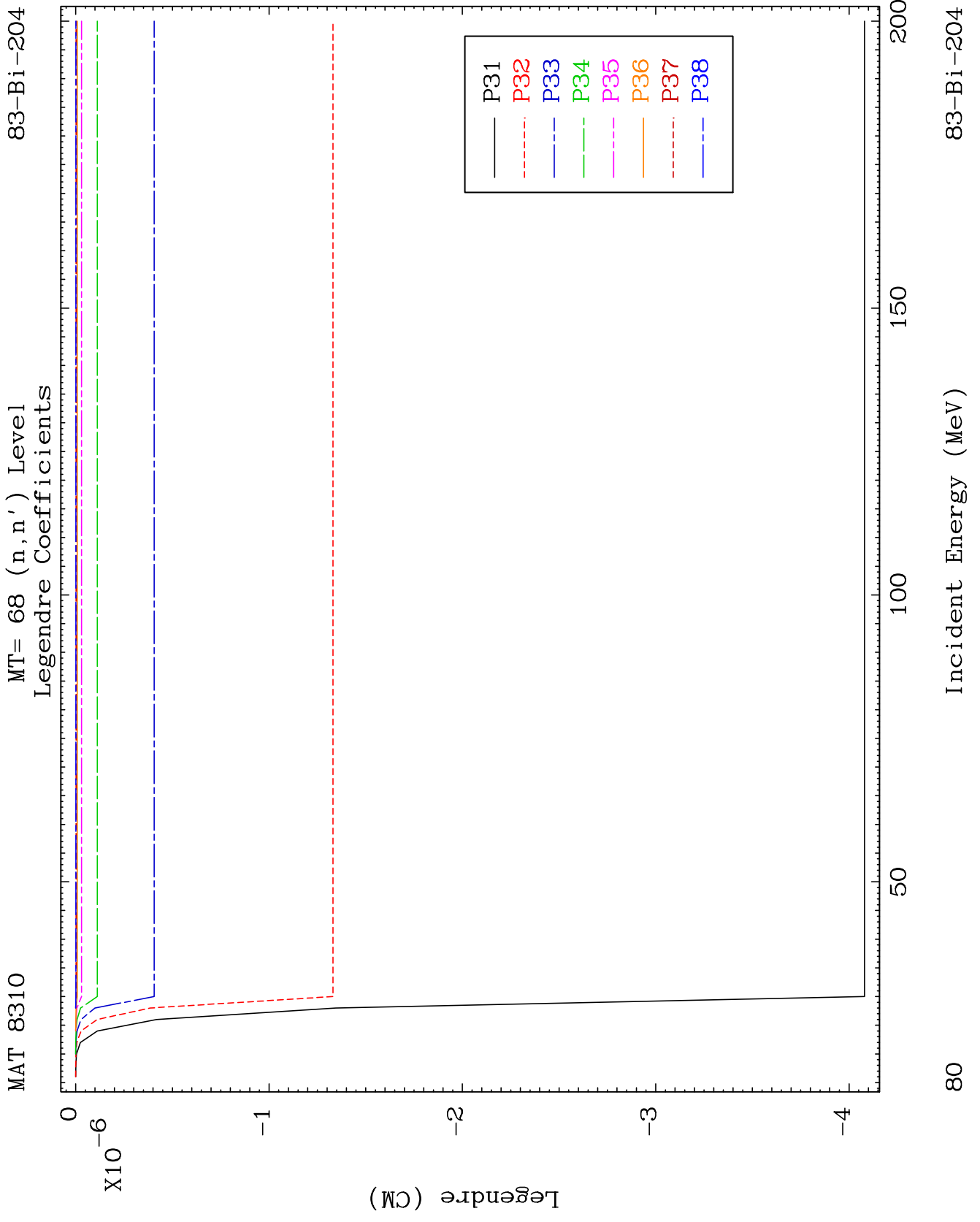


78

Incident Energy (MeV)

83-Bi-204

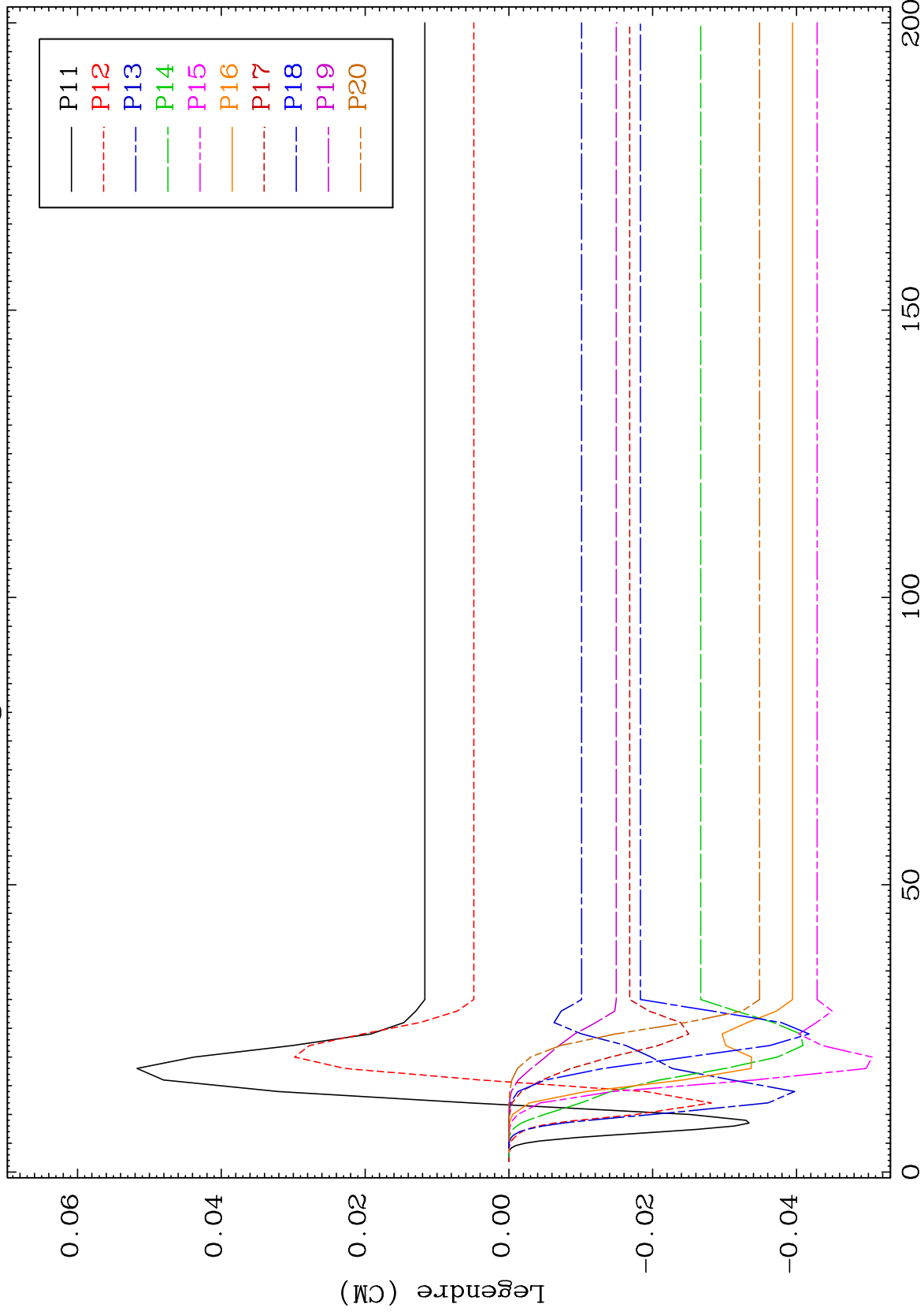




MAT 8310

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

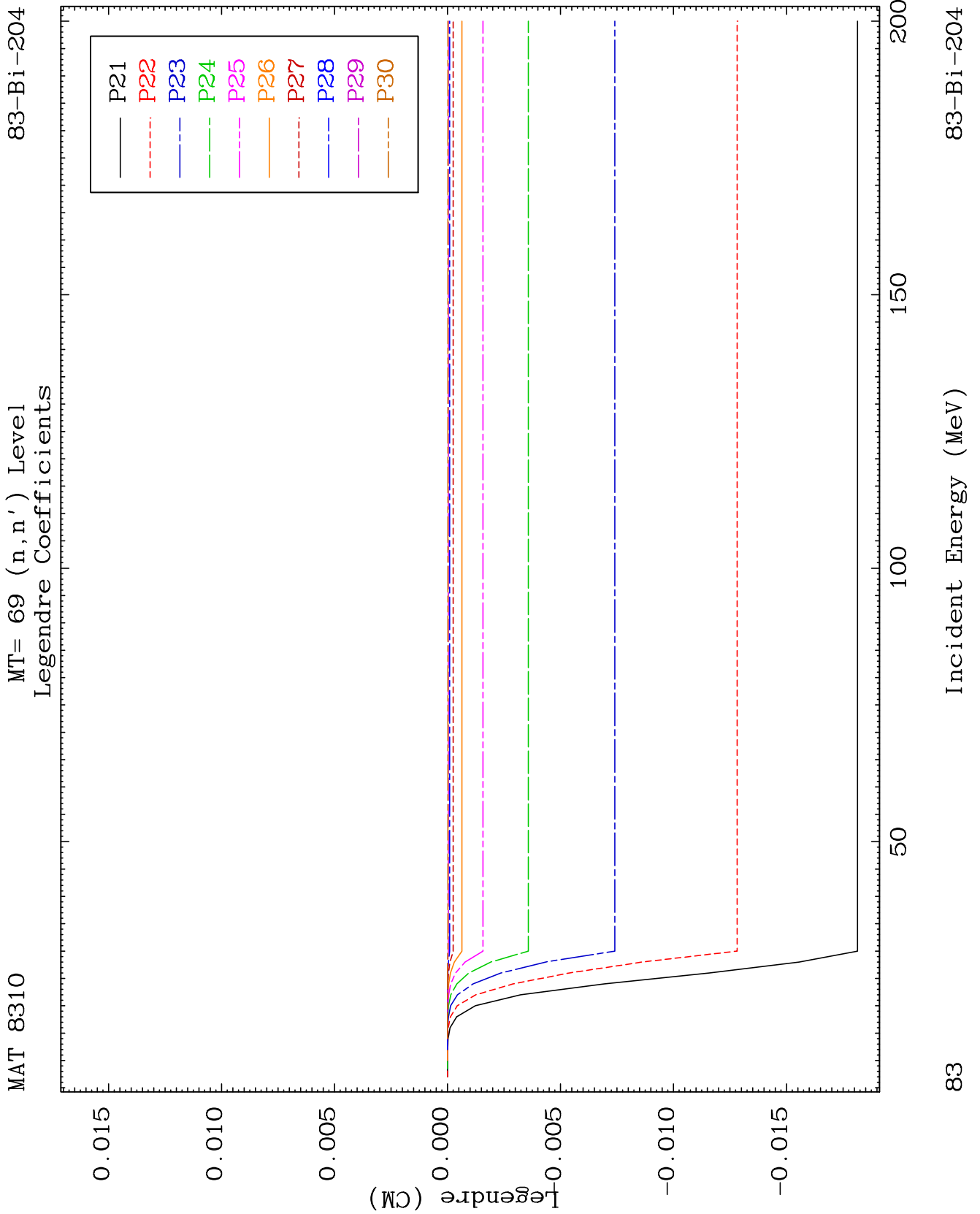
83-Bi-204

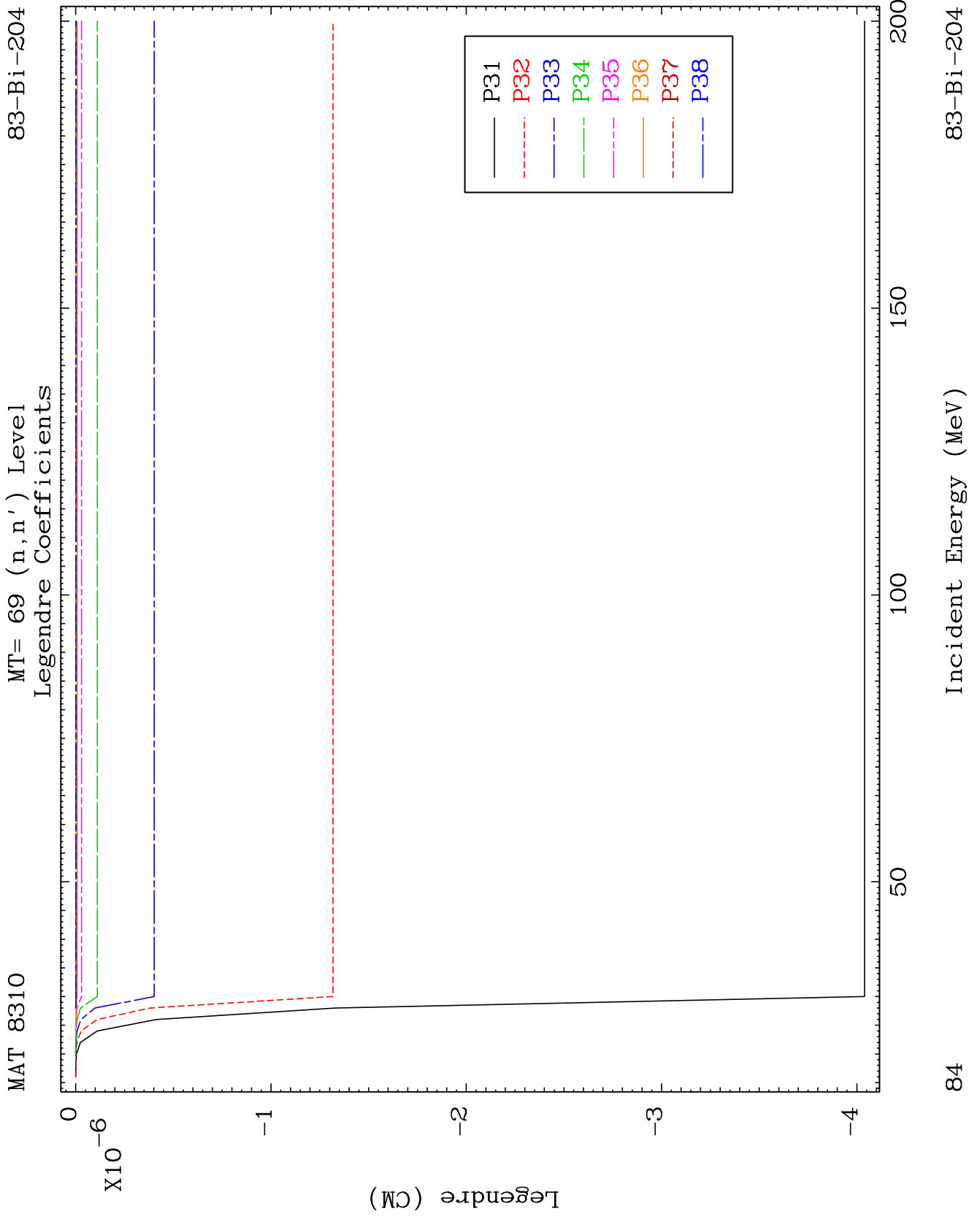


82

Incident Energy (MeV)

83-Bi-204

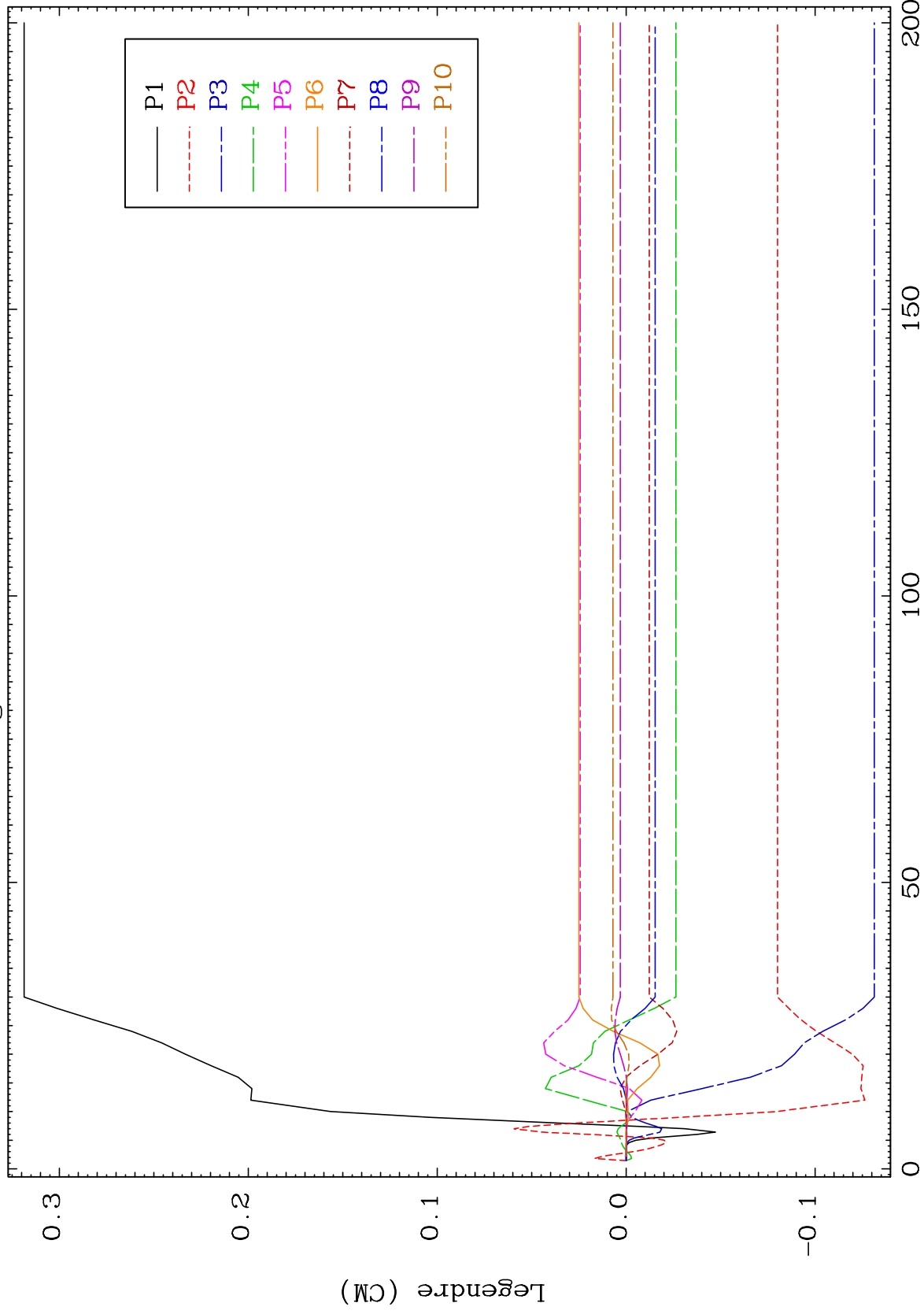




MAT 8310

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

83-Bi-204



85

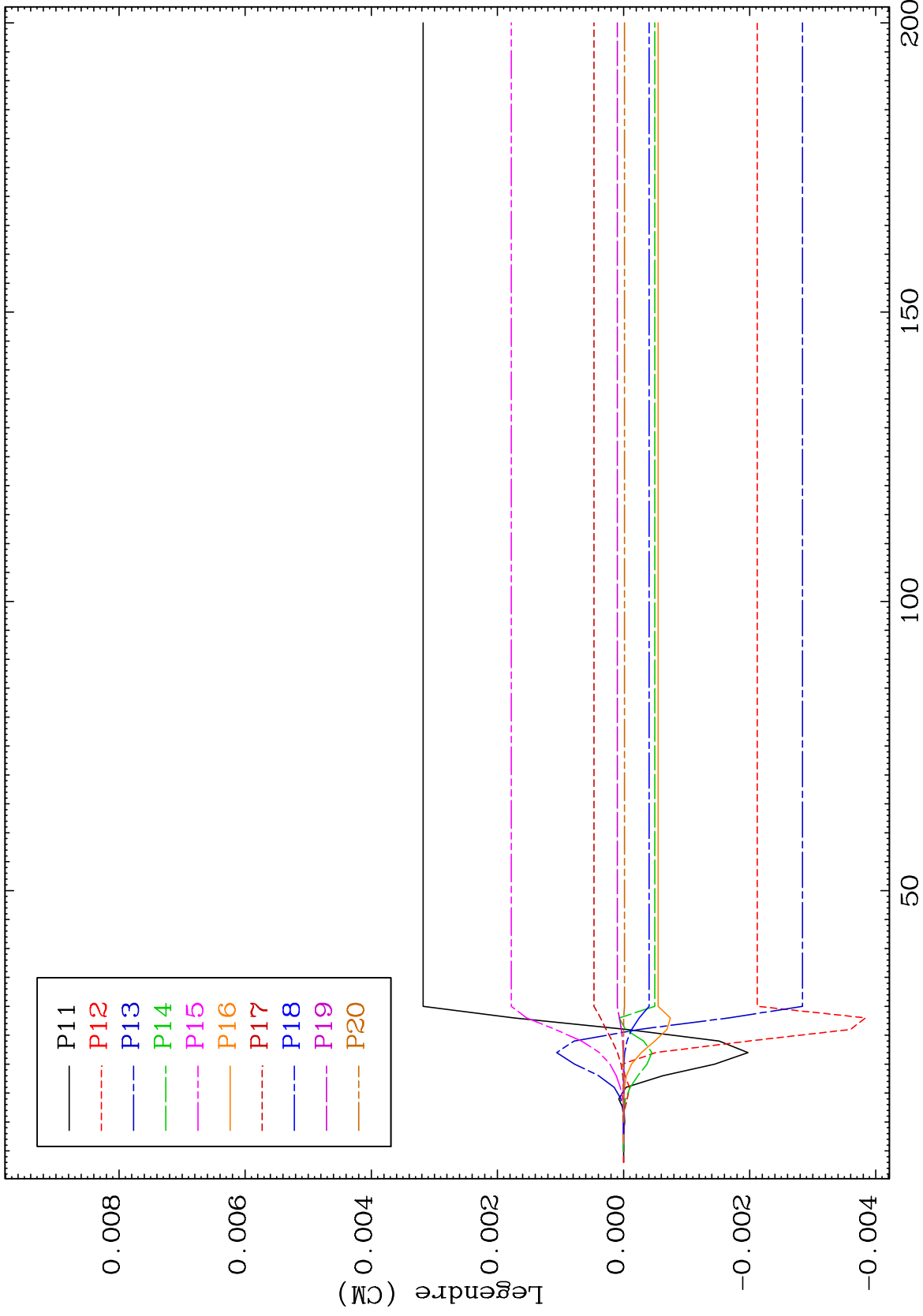
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

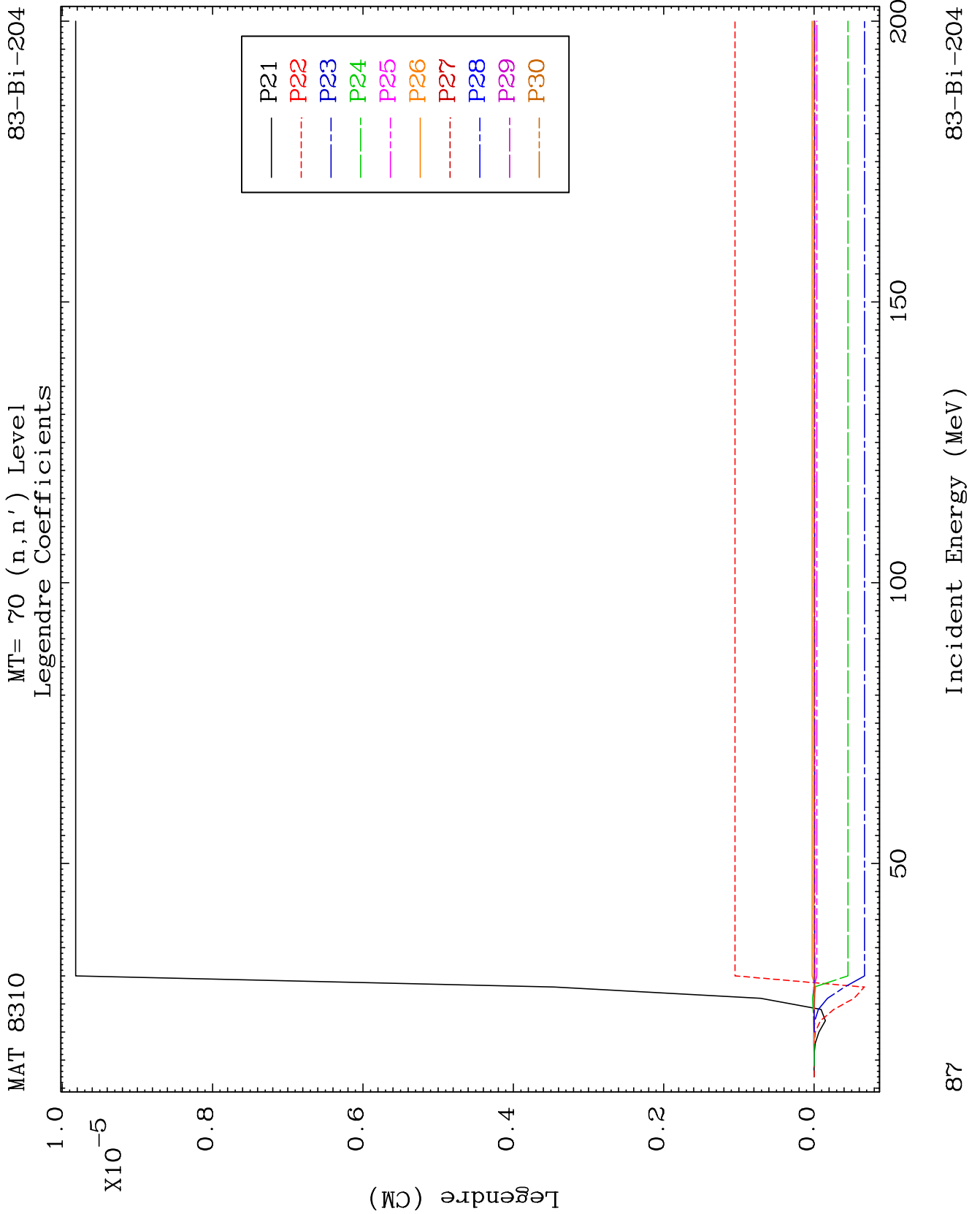
83-Bi-204

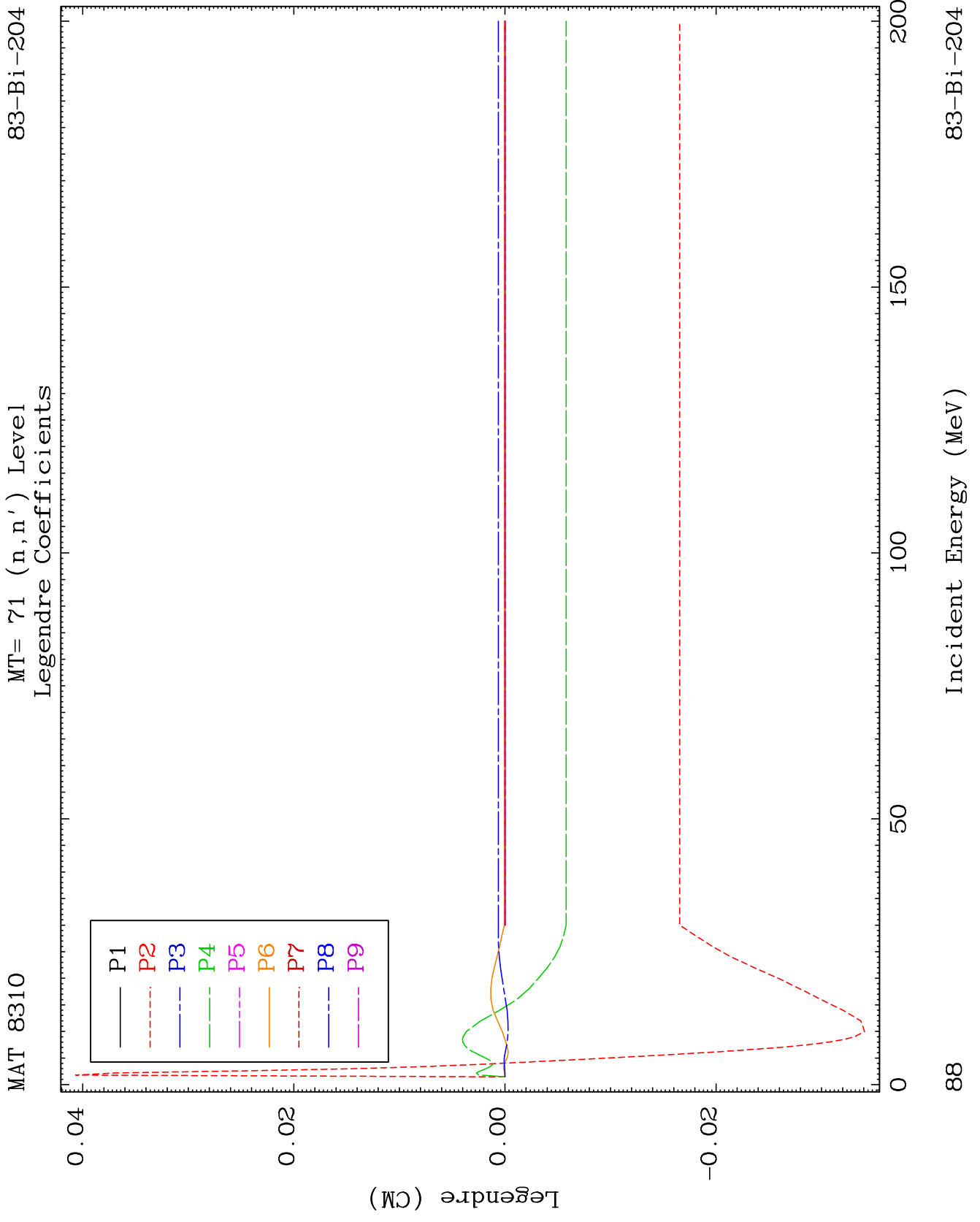


86

Incident Energy (MeV)

83-Bi-204

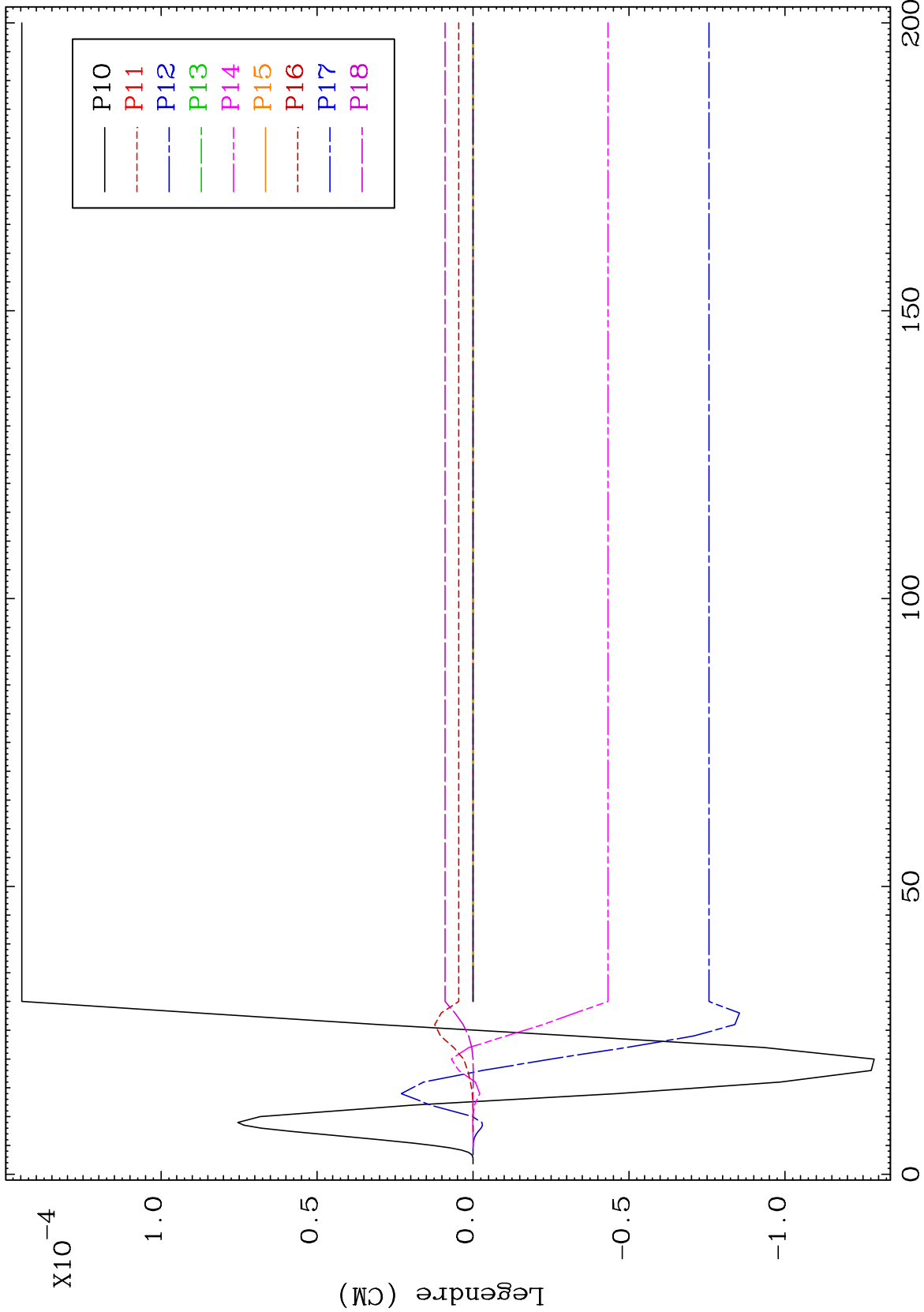




MAT 8310

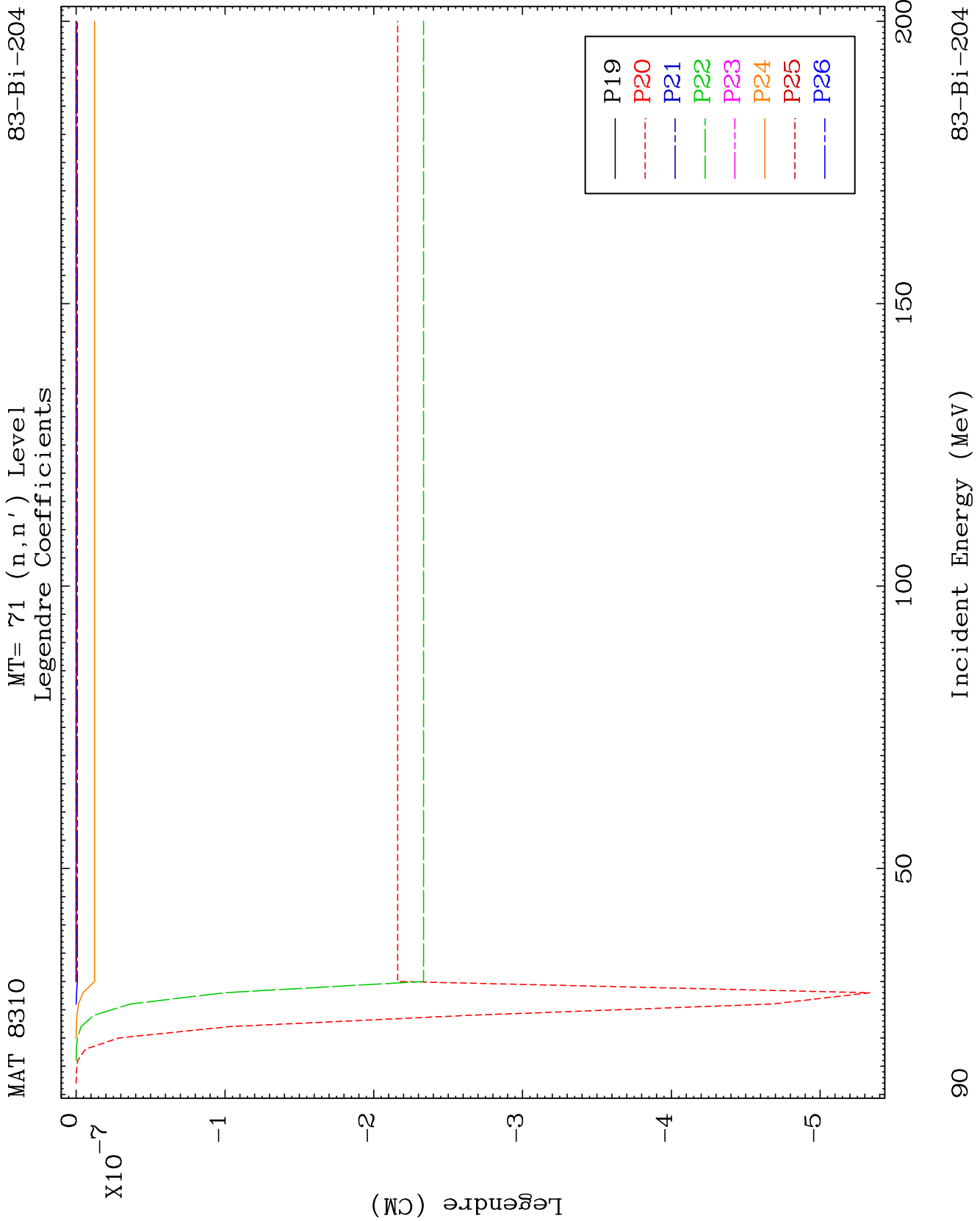
MT= 71 (n,n') Level
Legendre Coefficients

83-Bi-204



89

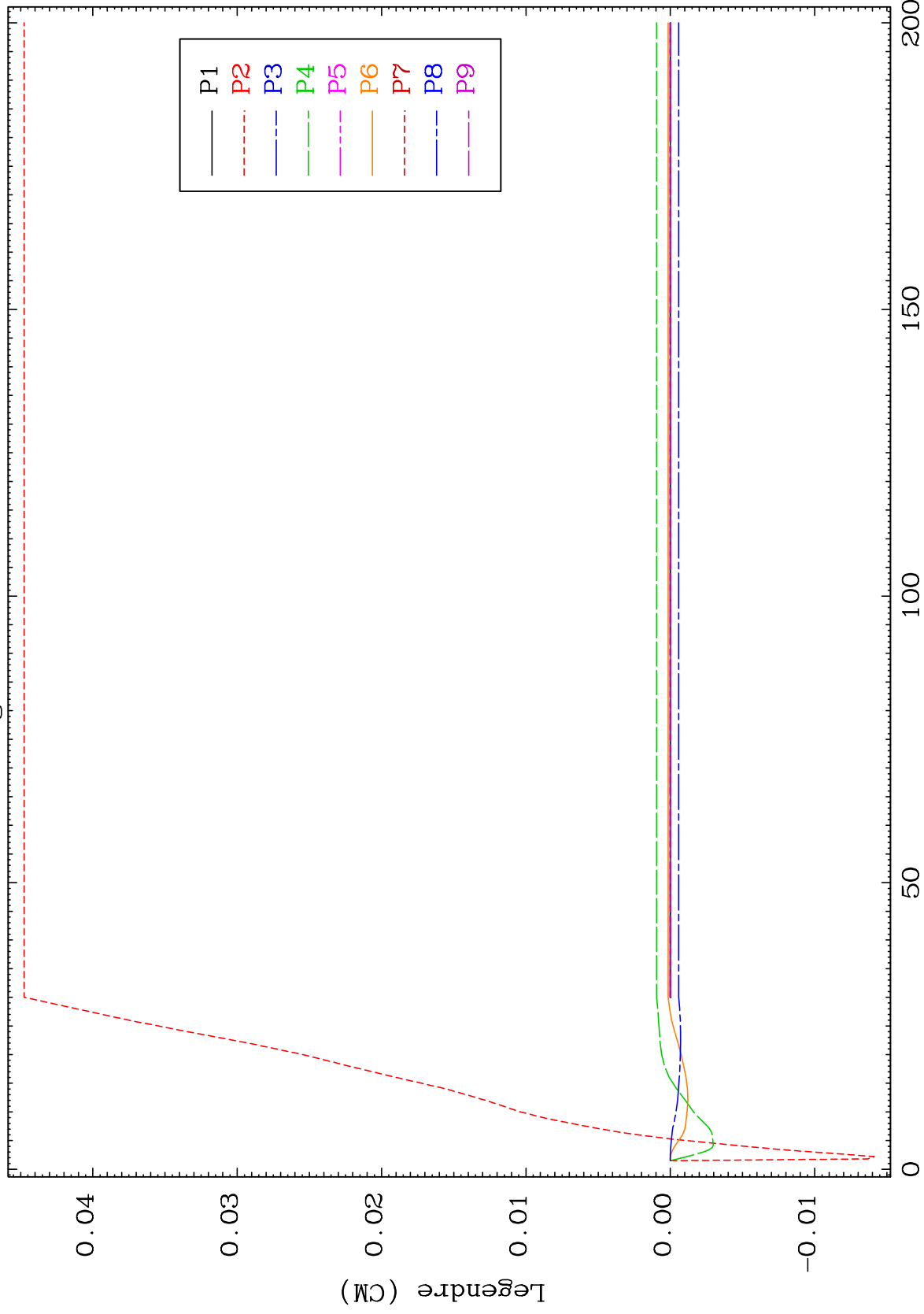
83-Bi-204



MAT 8310

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

83-Bi-204



91

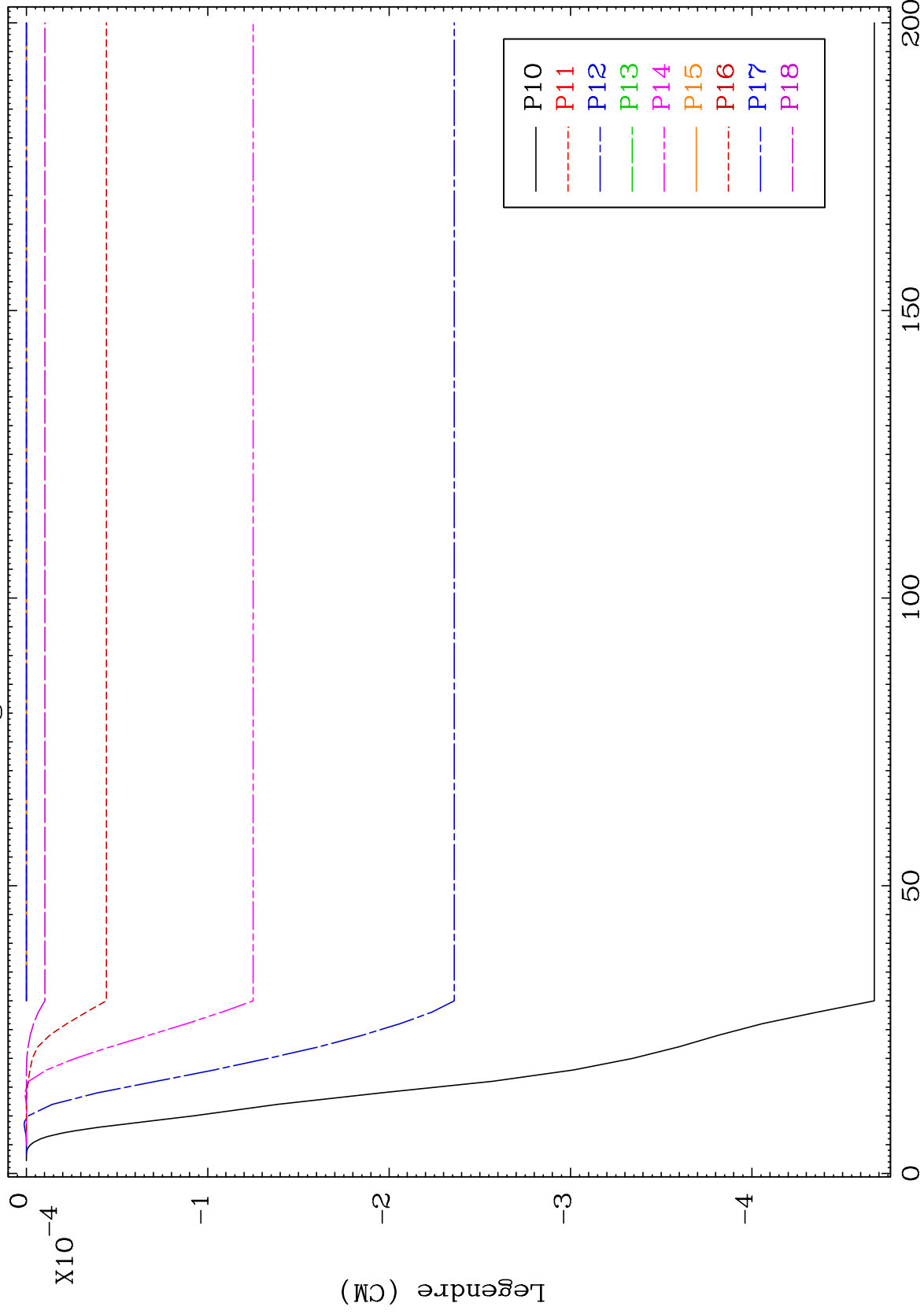
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

83-Bi-204



92

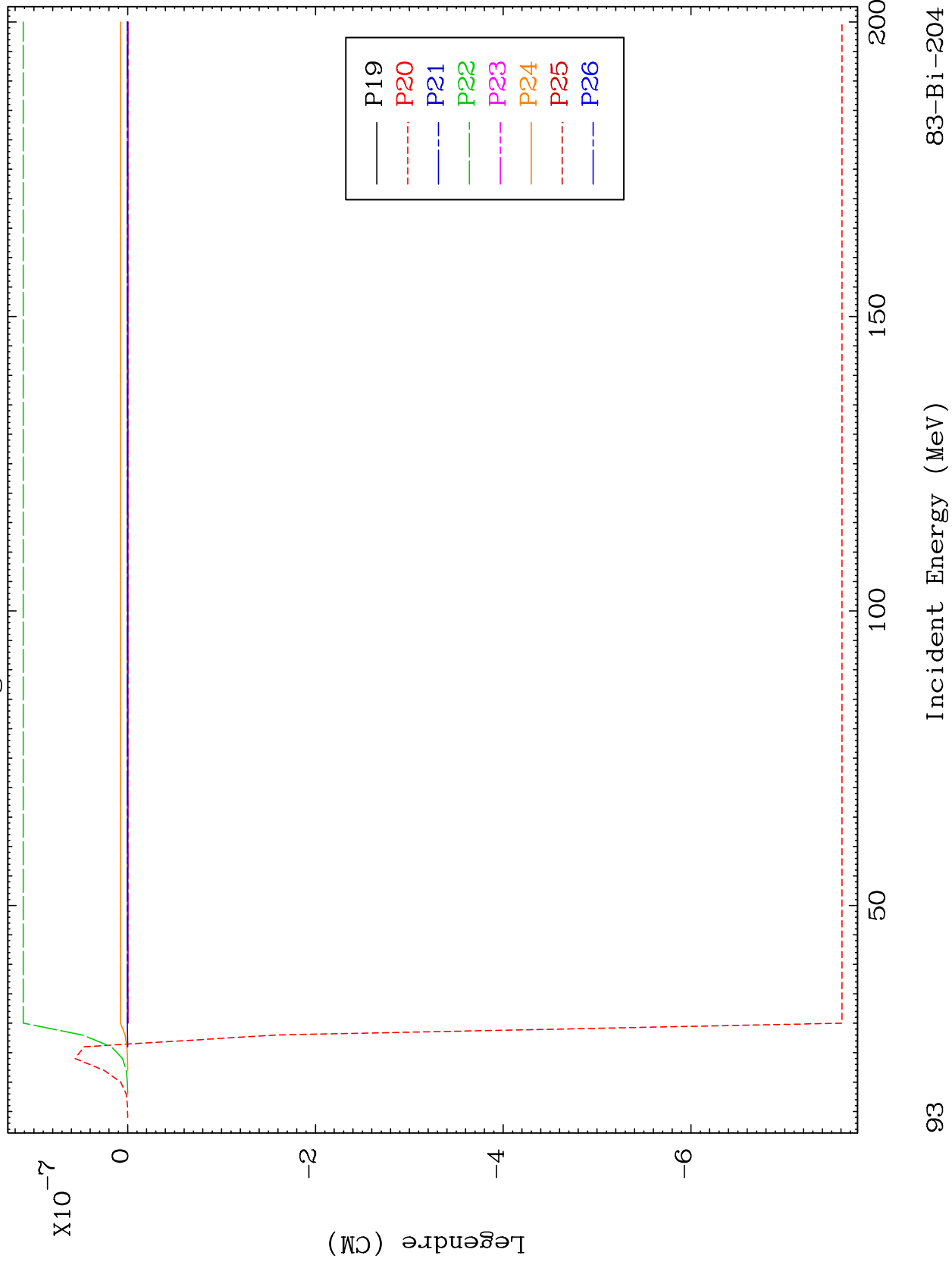
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

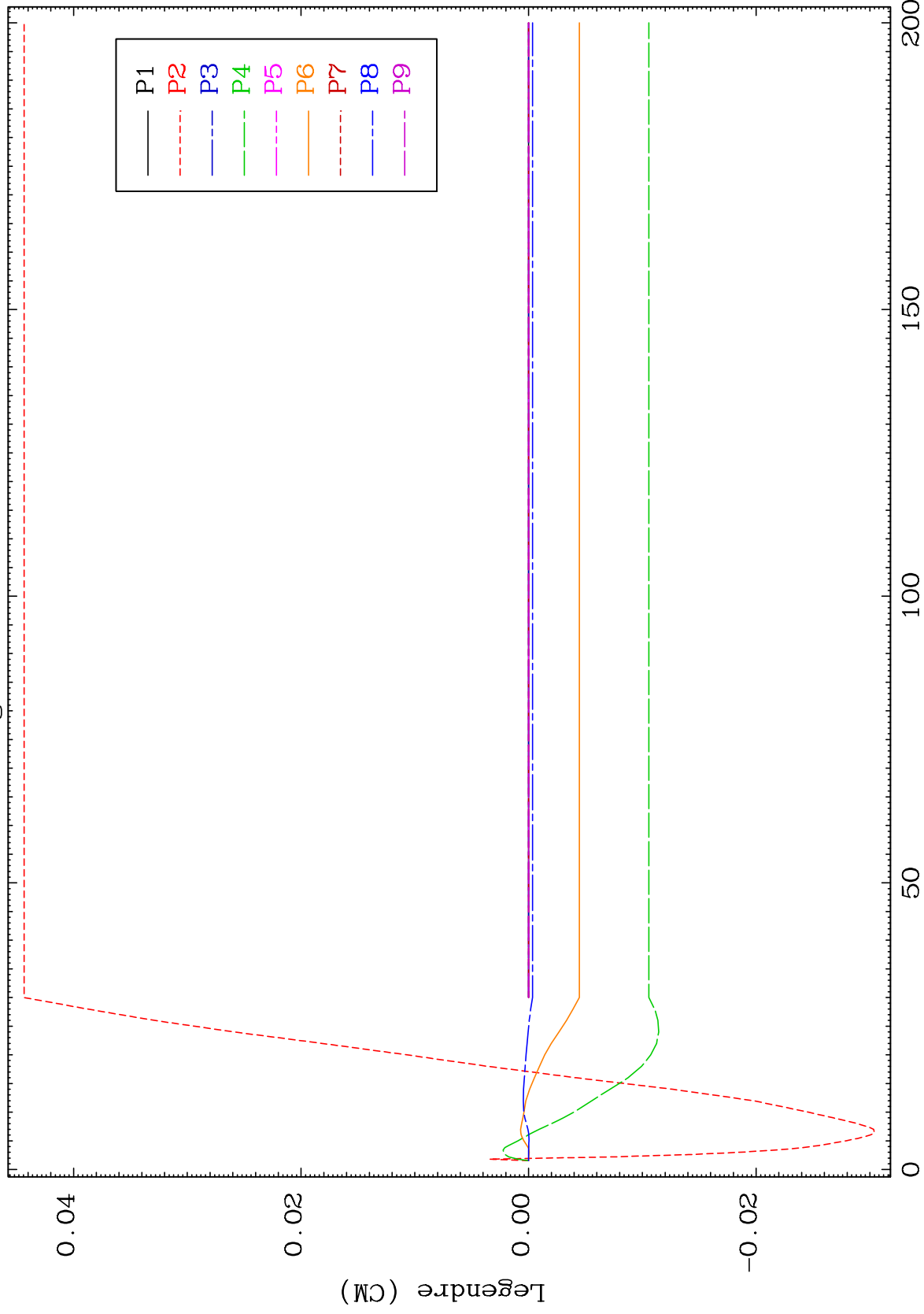
83-Bi-204



MAT 8310

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

83-Bi-204



94

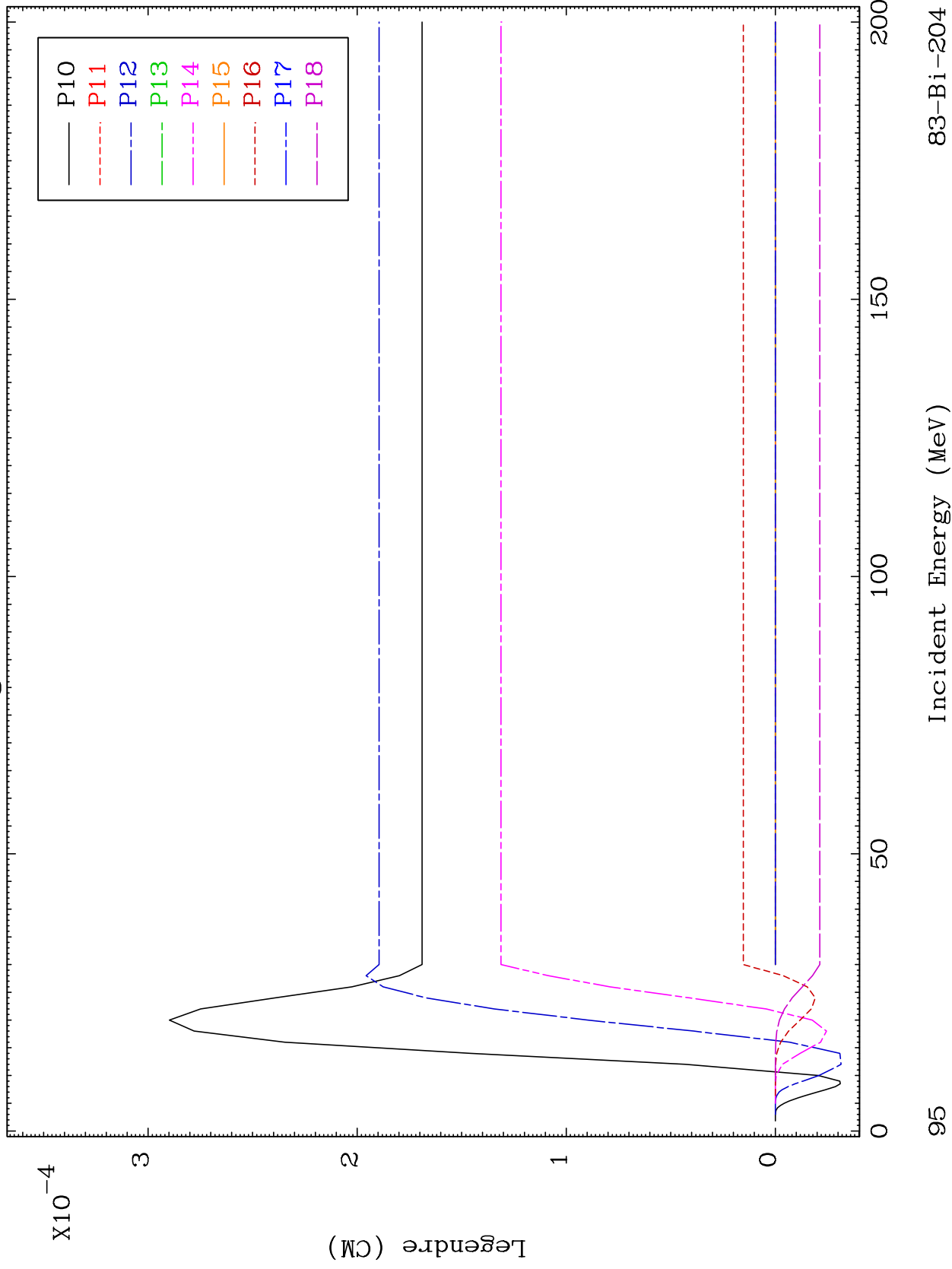
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

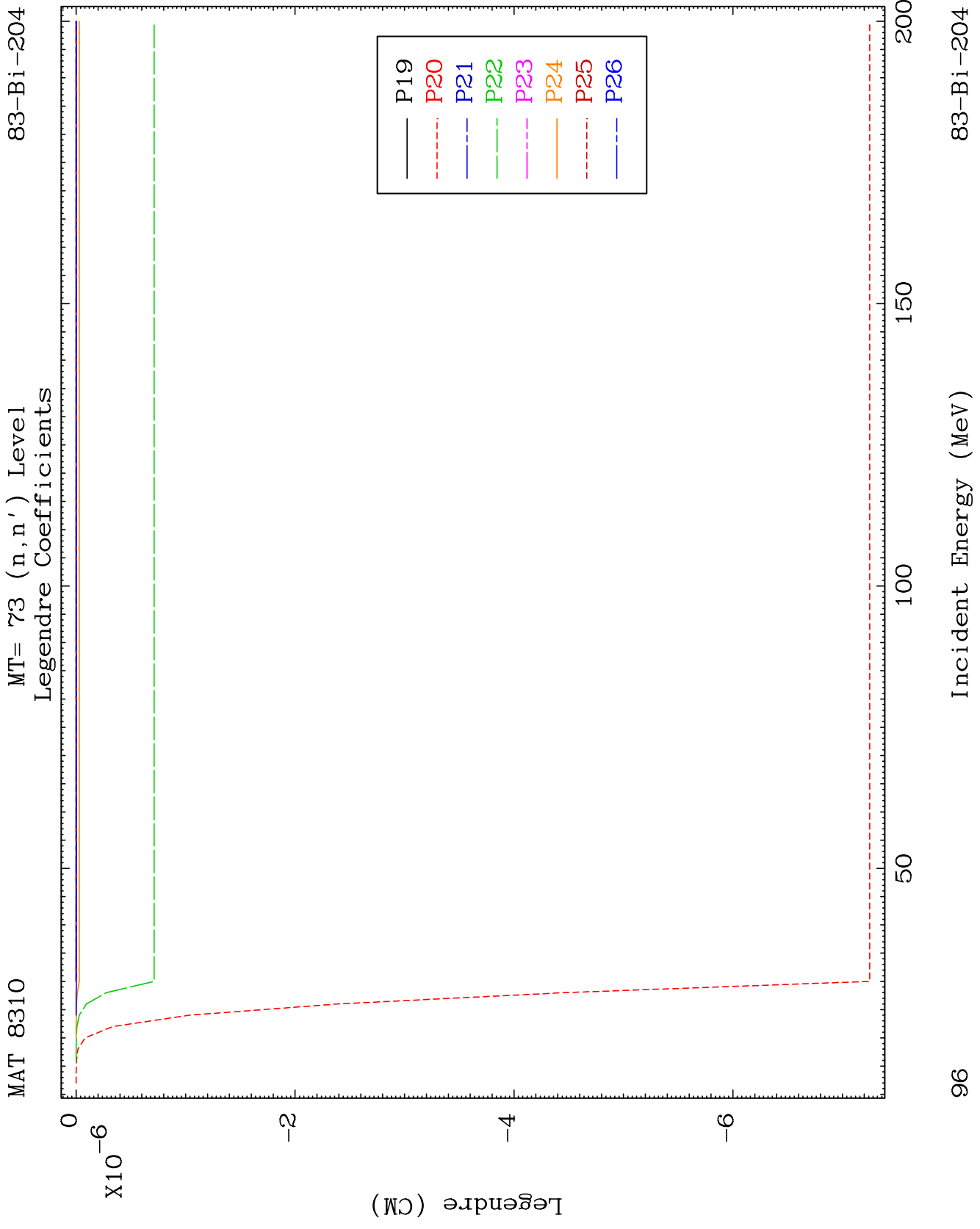
83-Bi-204



83-Bi-204

Incident Energy (MeV)

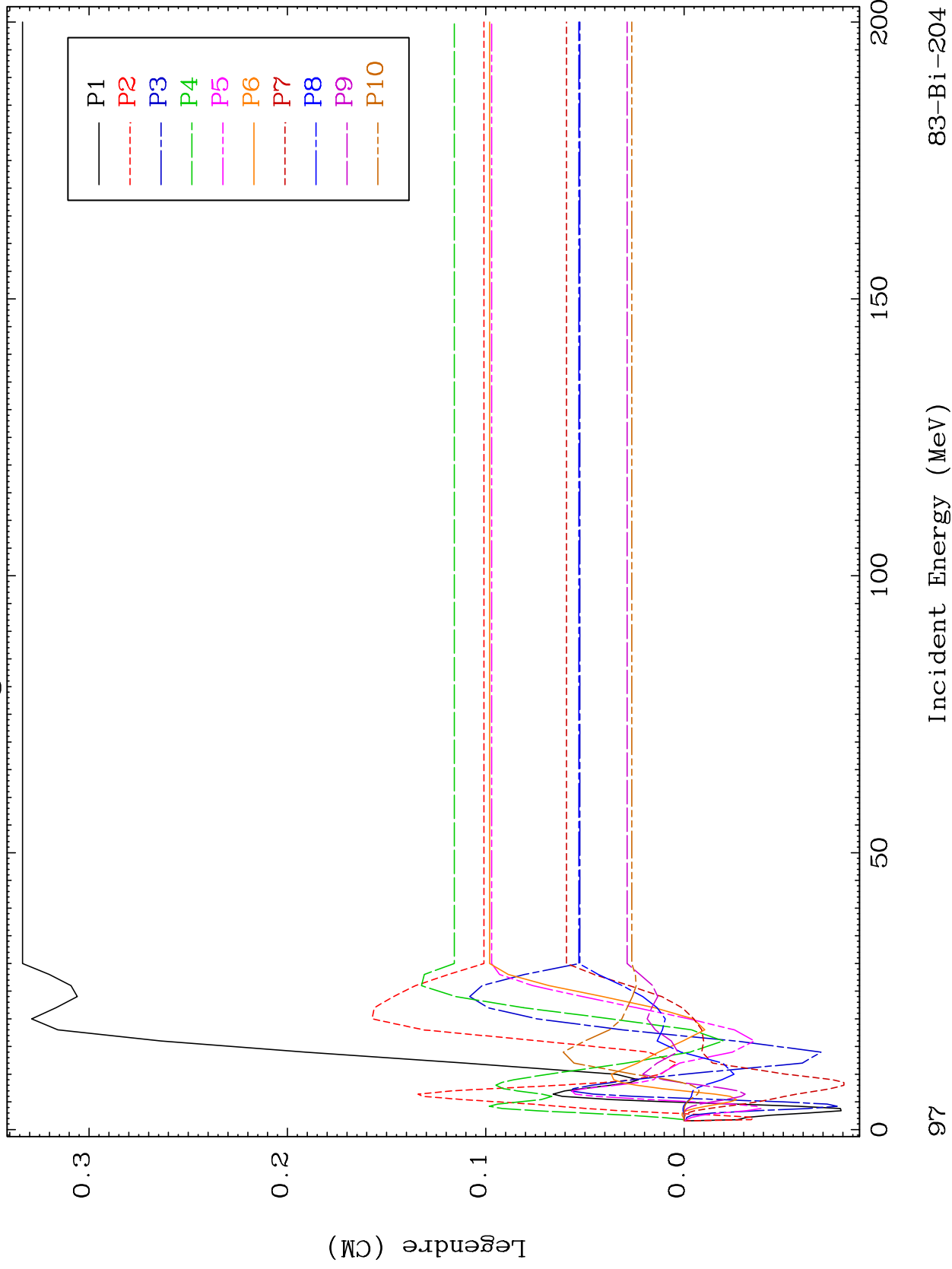
95



MAT 8310

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

83-Bi-204



97

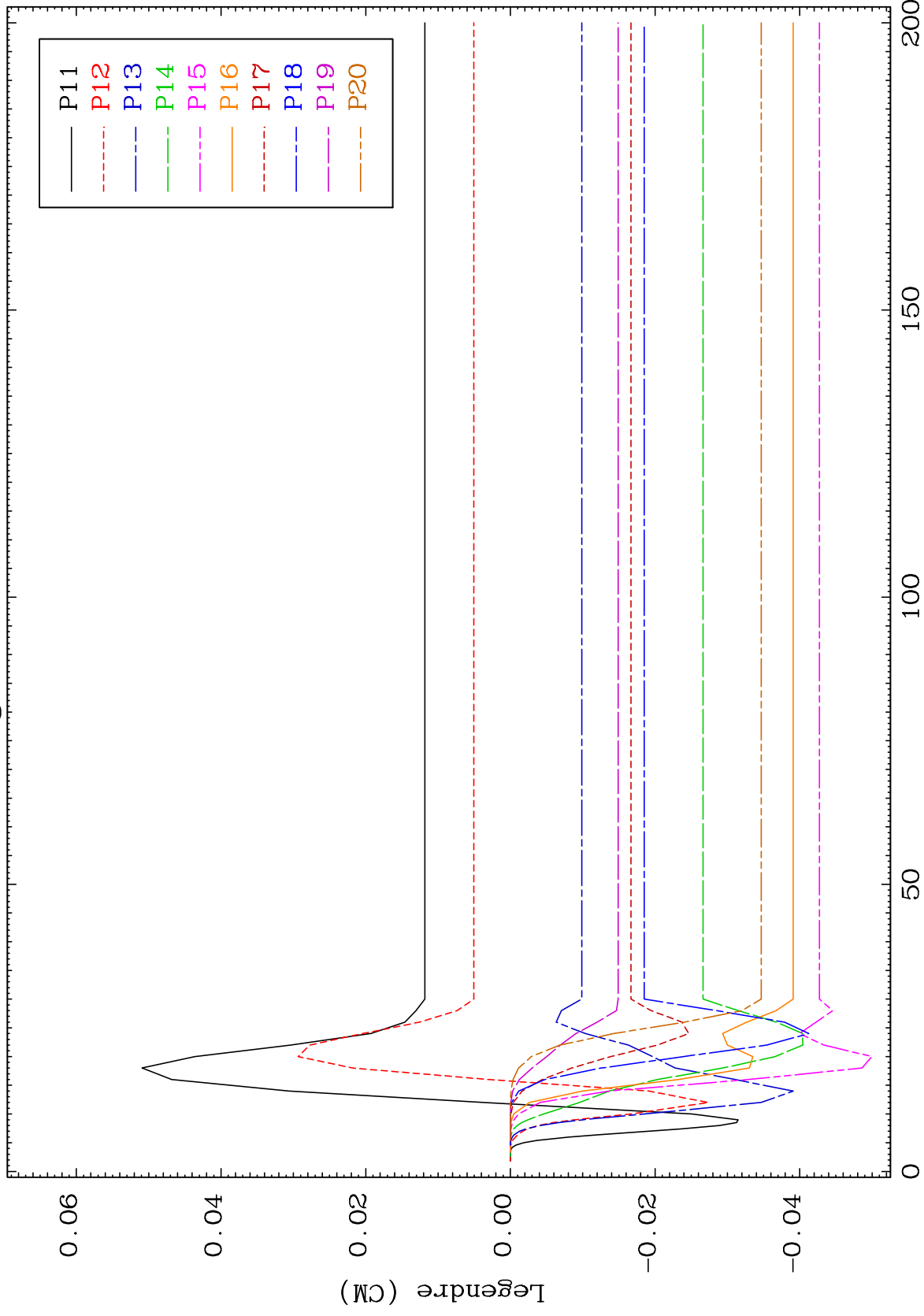
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

83-Bi-204



98

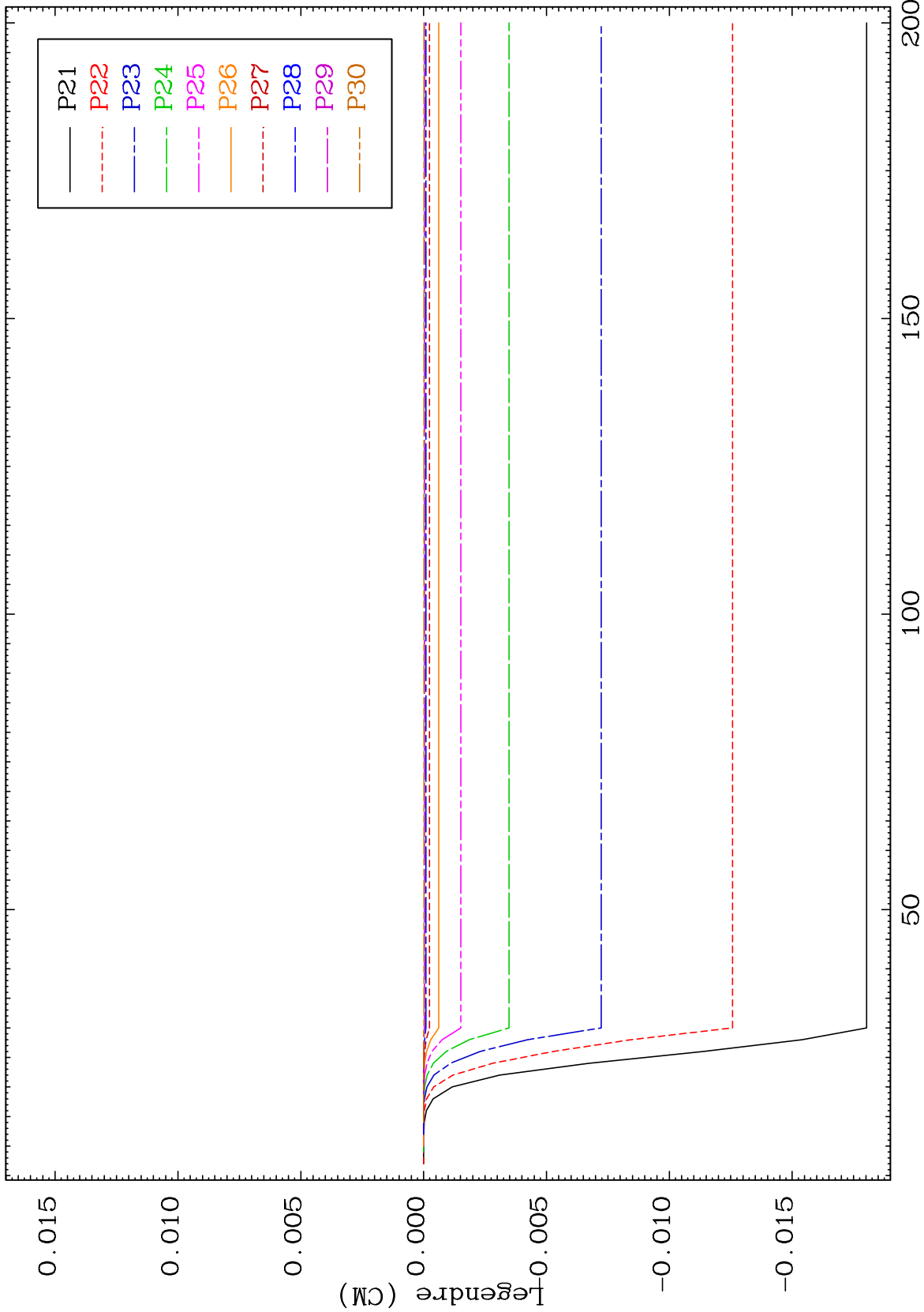
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

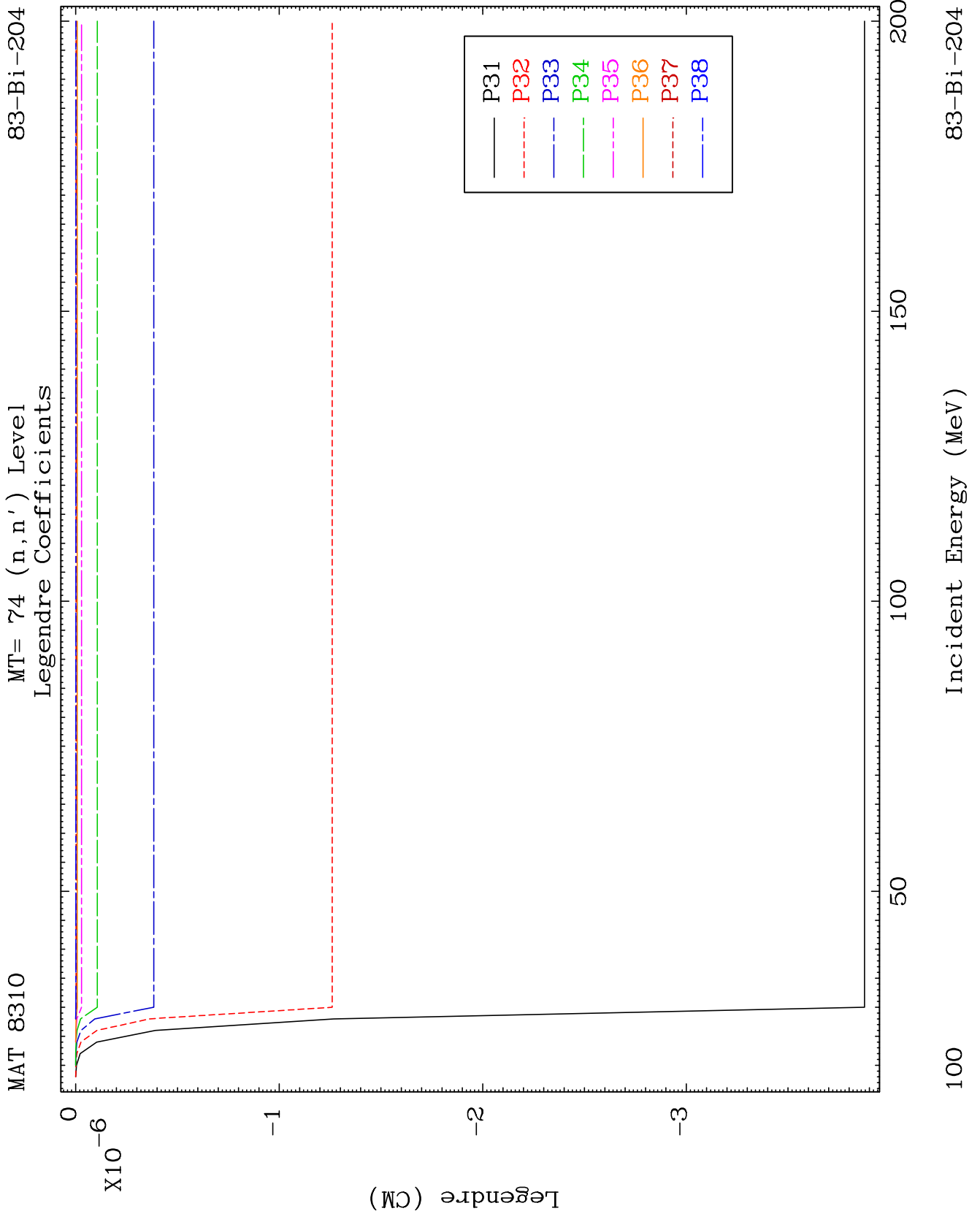
83-Bi-204



99

Incident Energy (MeV)

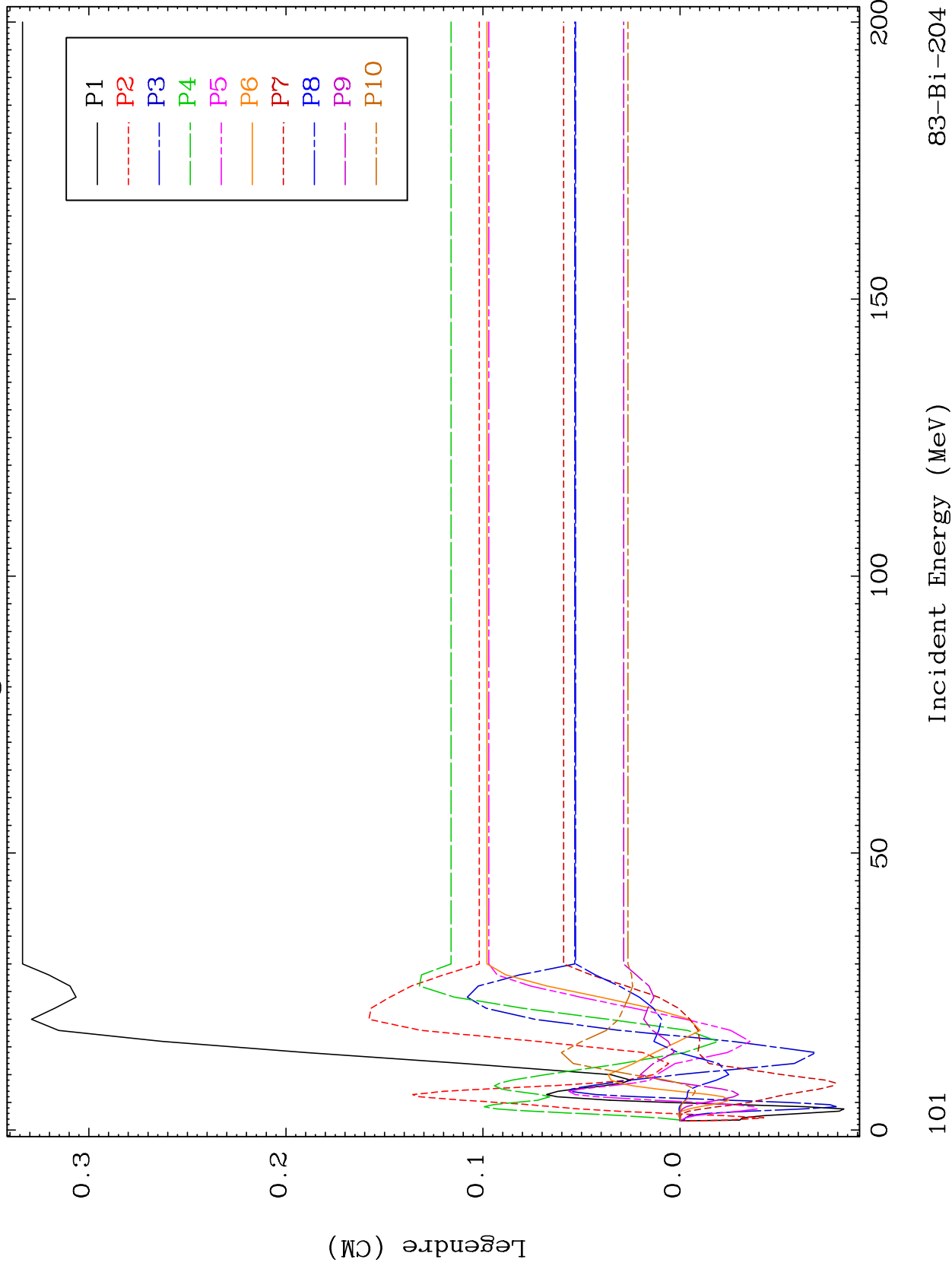
83-Bi-204



MAT 8310

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

83-Bi-204



83-Bi-204

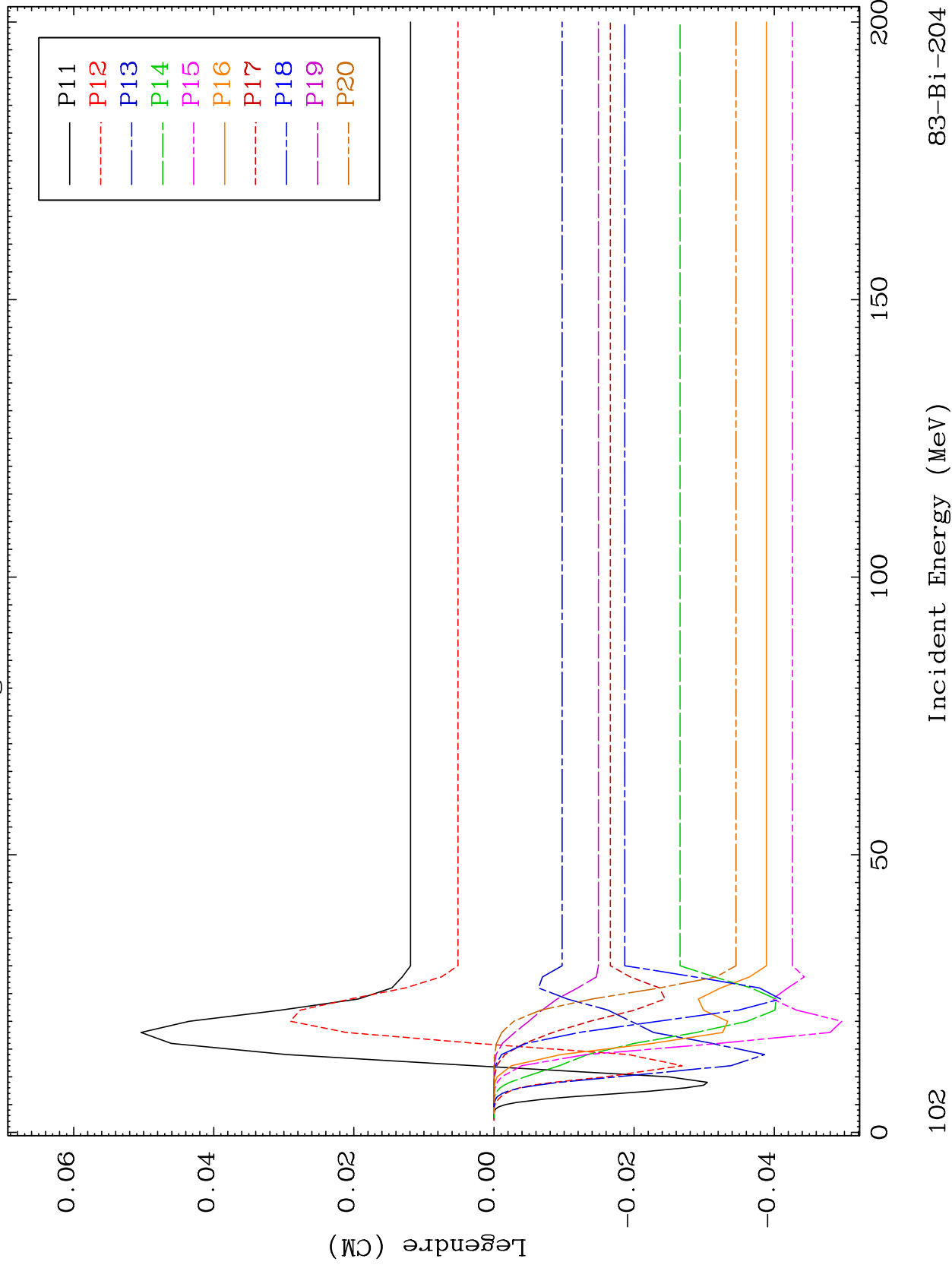
Incident Energy (MeV)

101

MAT 8310

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

83-Bi-204



83-Bi-204

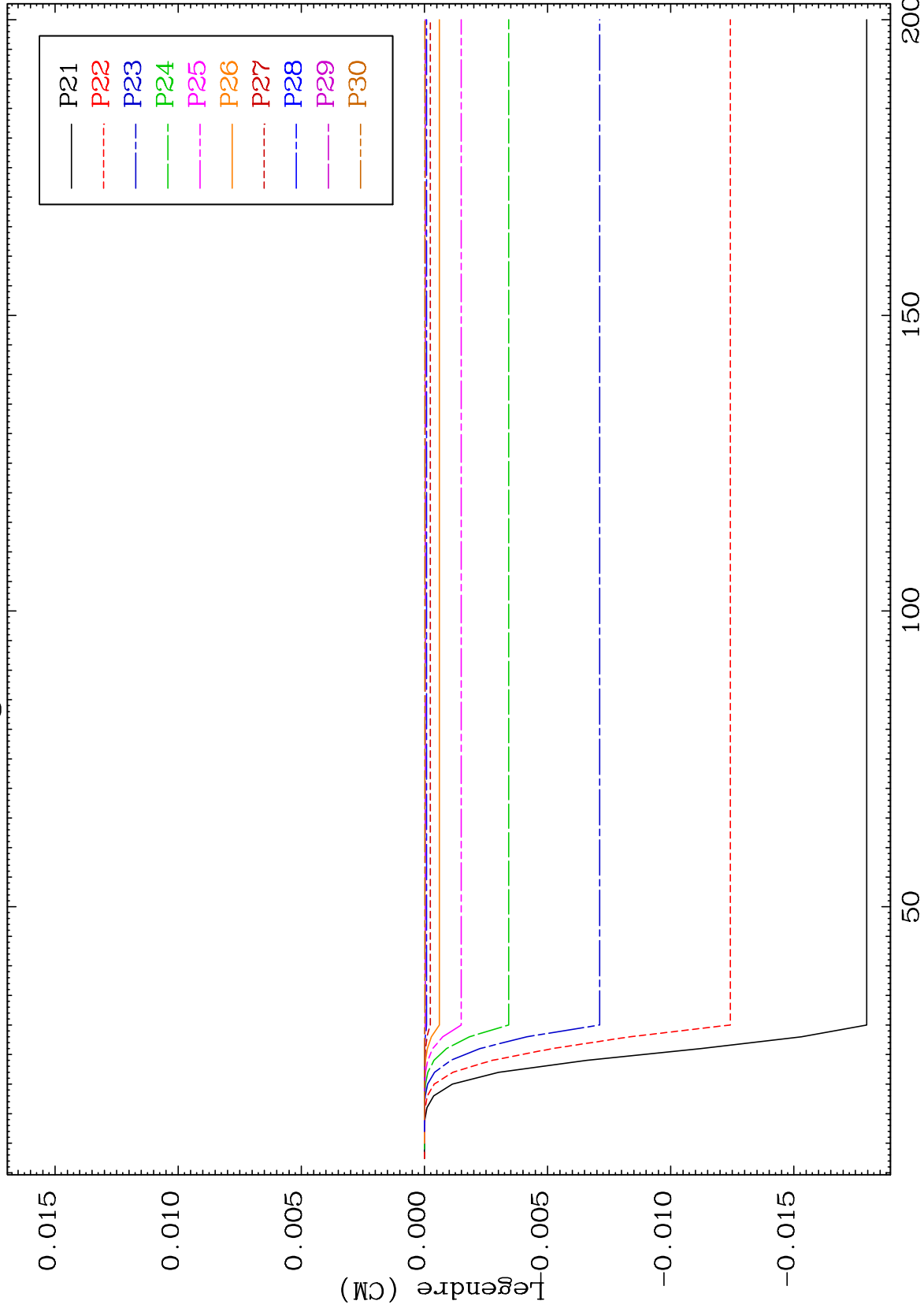
Incident Energy (MeV)

102

MAT 8310

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

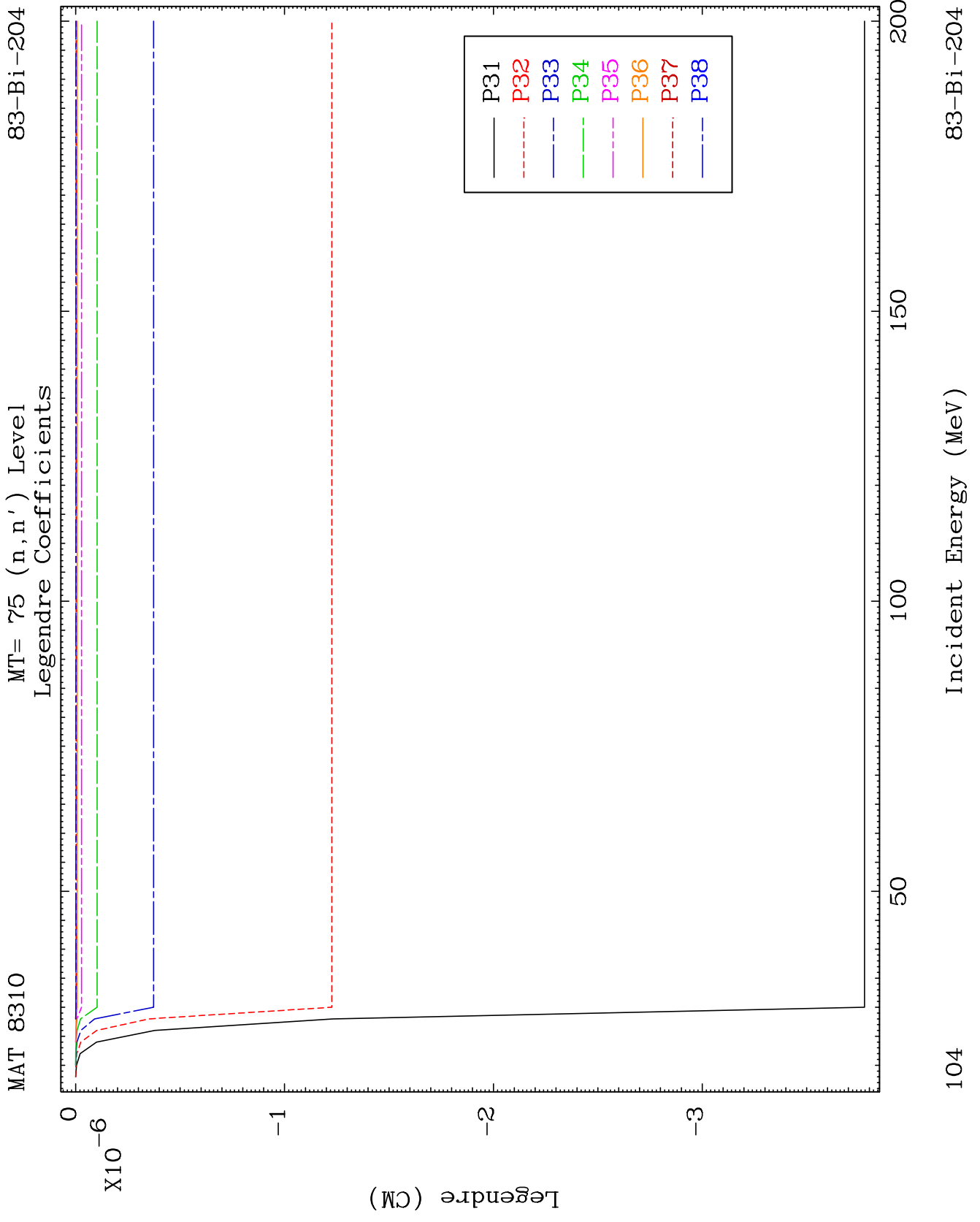
83-Bi-204



103

Incident Energy (MeV)

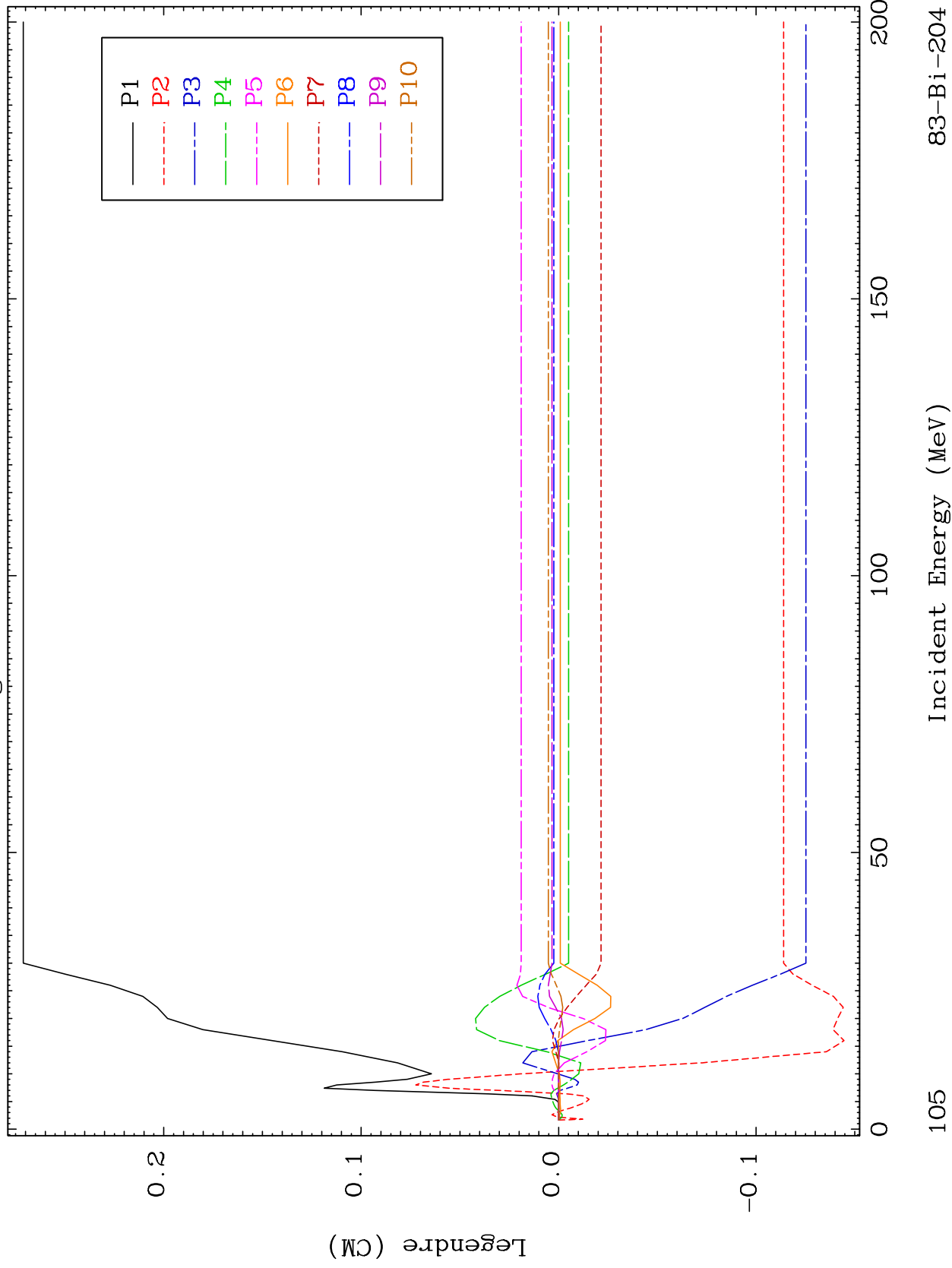
83-Bi-204



MAT 8310

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

83-Bi-204



83-Bi-204

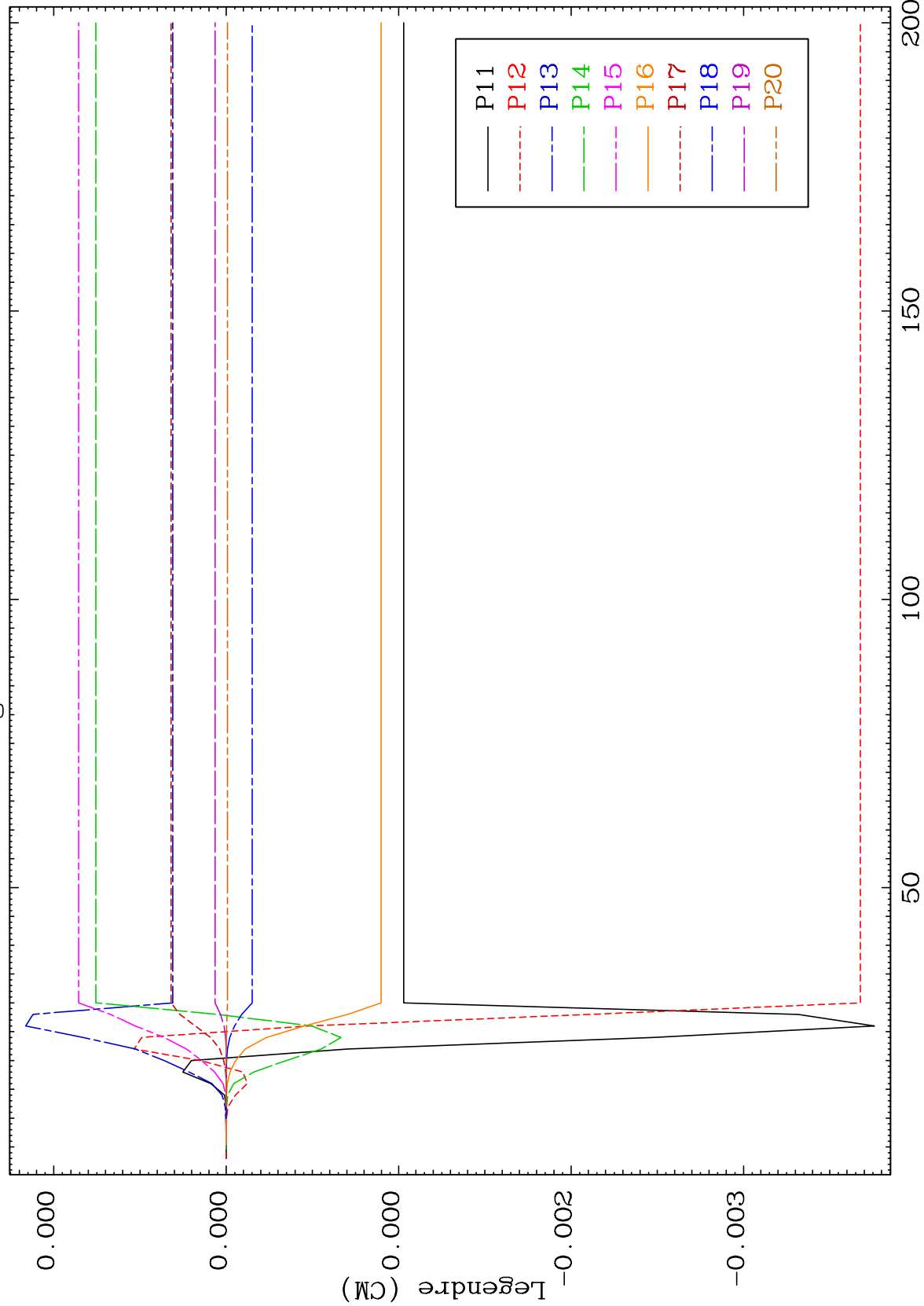
Incident Energy (MeV)

105

MAT 8310

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

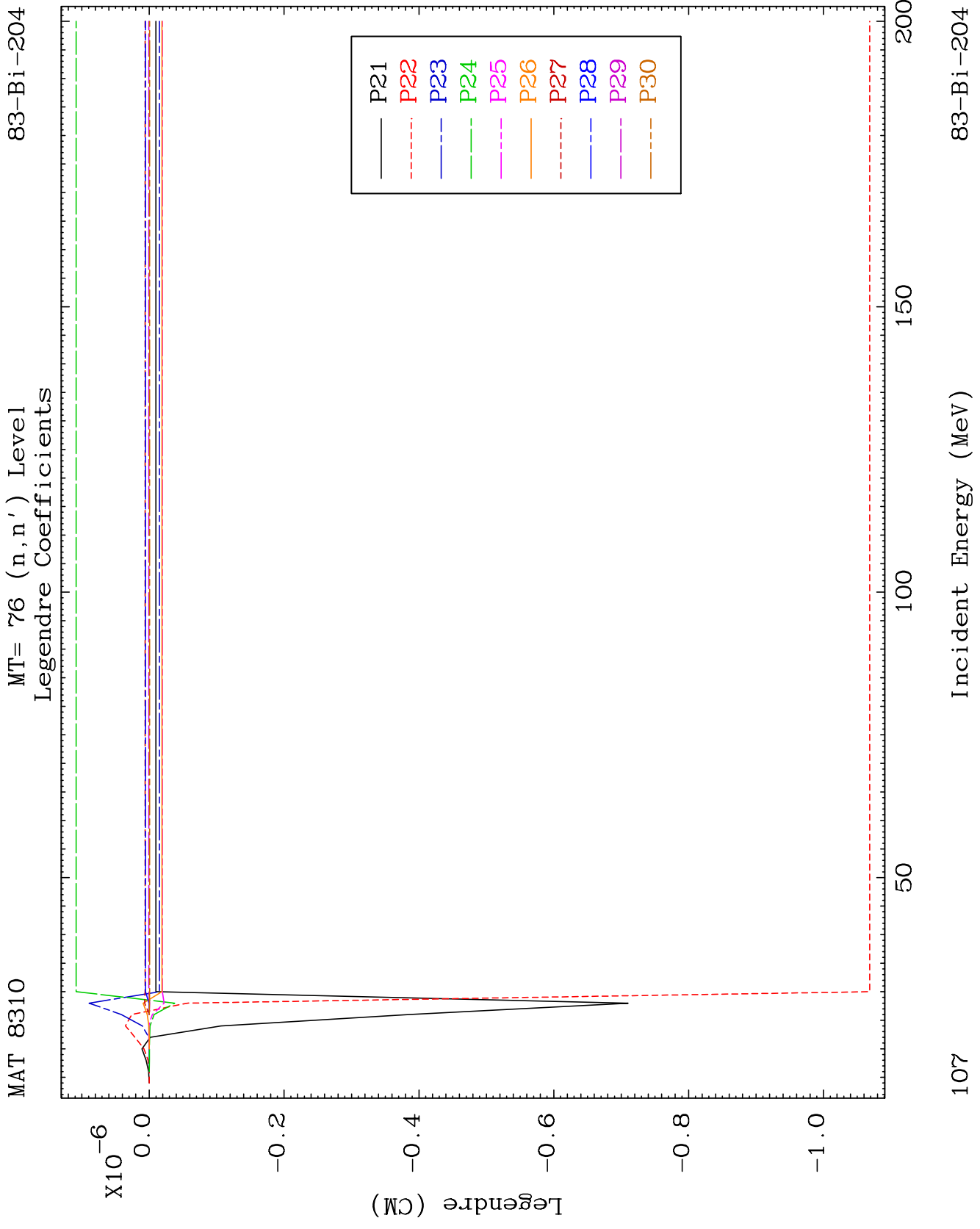
83-Bi-204



106

Incident Energy (MeV)

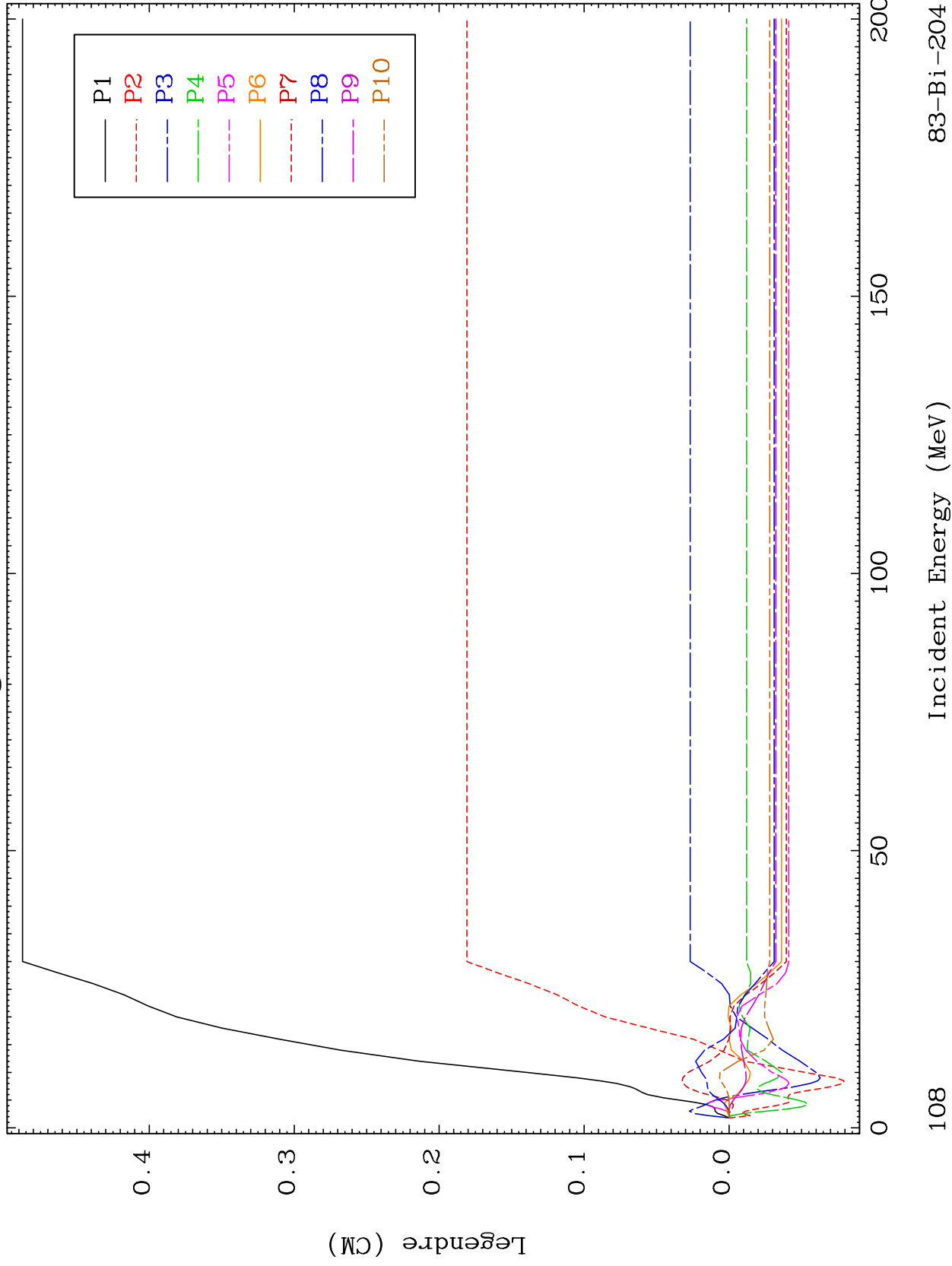
83-Bi-204



MAT 8310

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

83-Bi-204



83-Bi-204

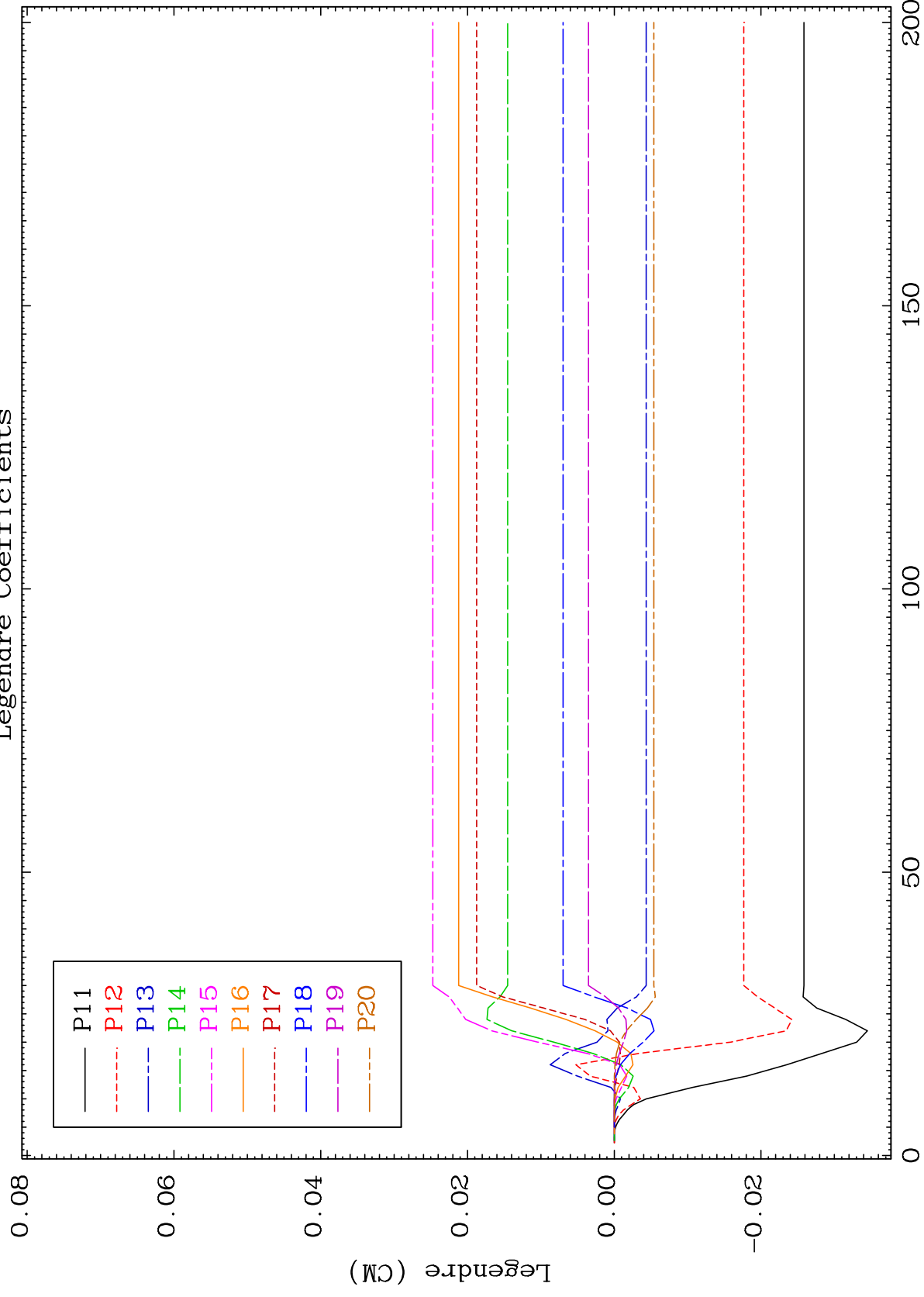
Incident Energy (MeV)

108

MAT 8310

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

83-Bi-204



109

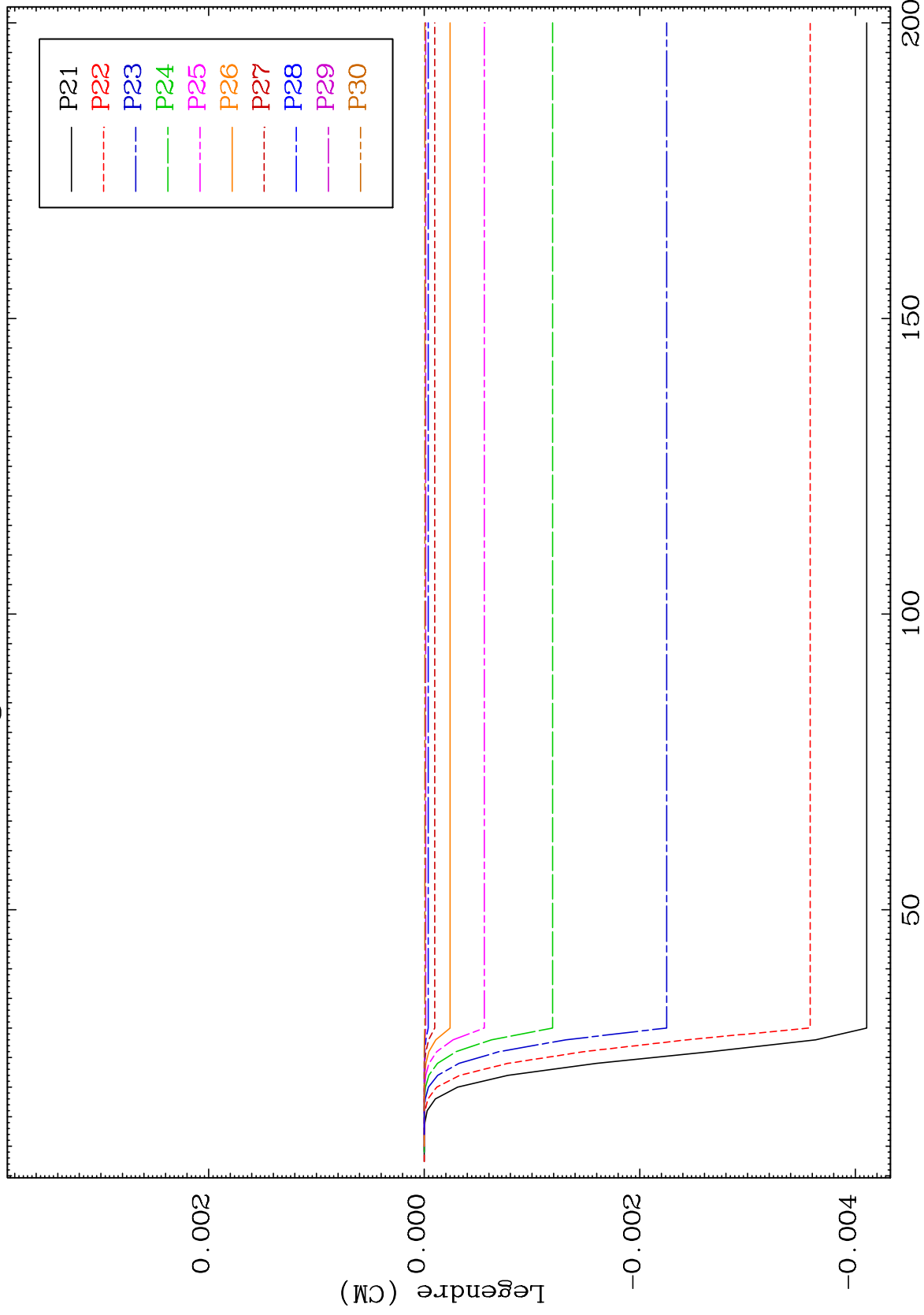
Incident Energy (MeV)

83-Bi-204

MAT 8310

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

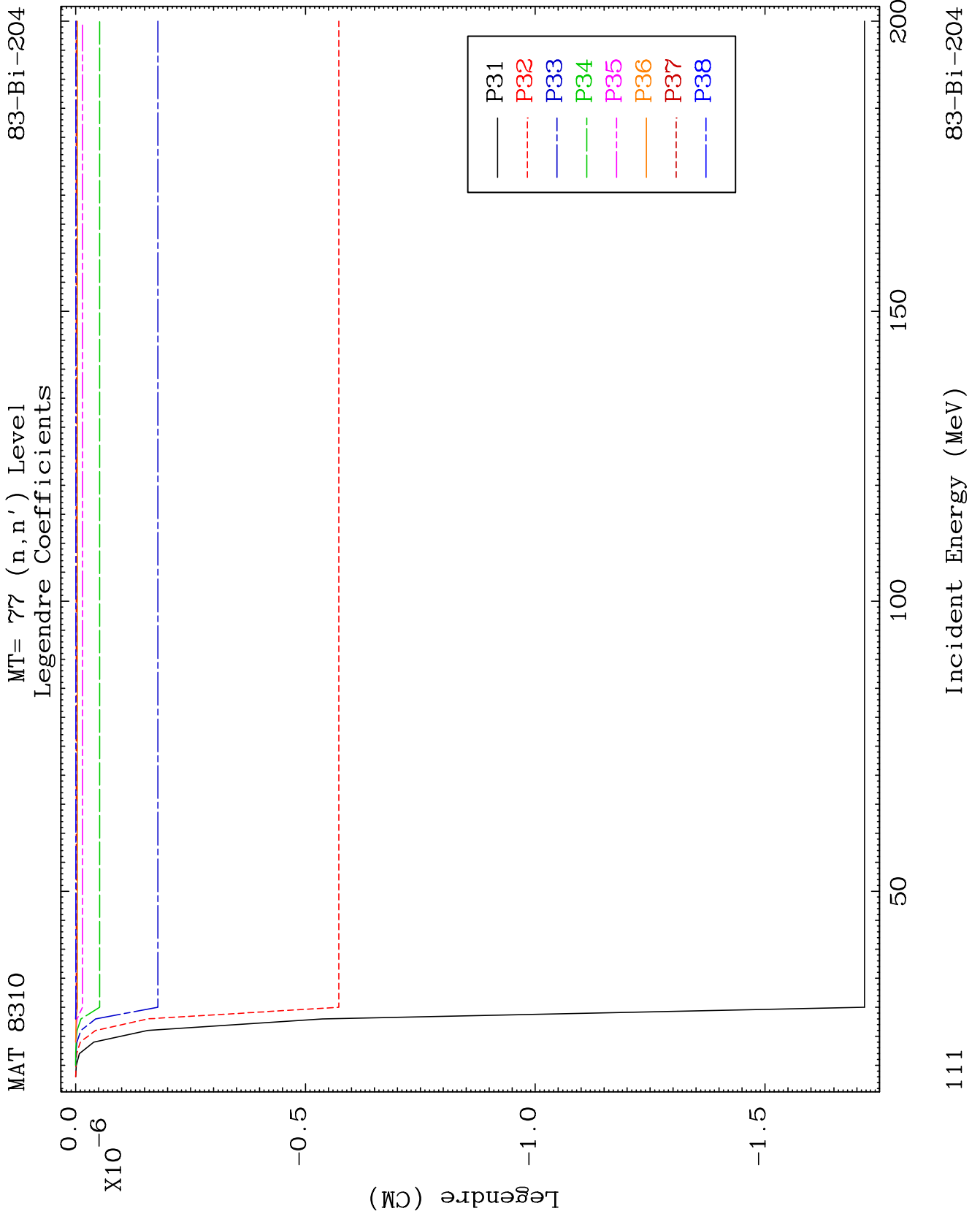
83-Bi-204

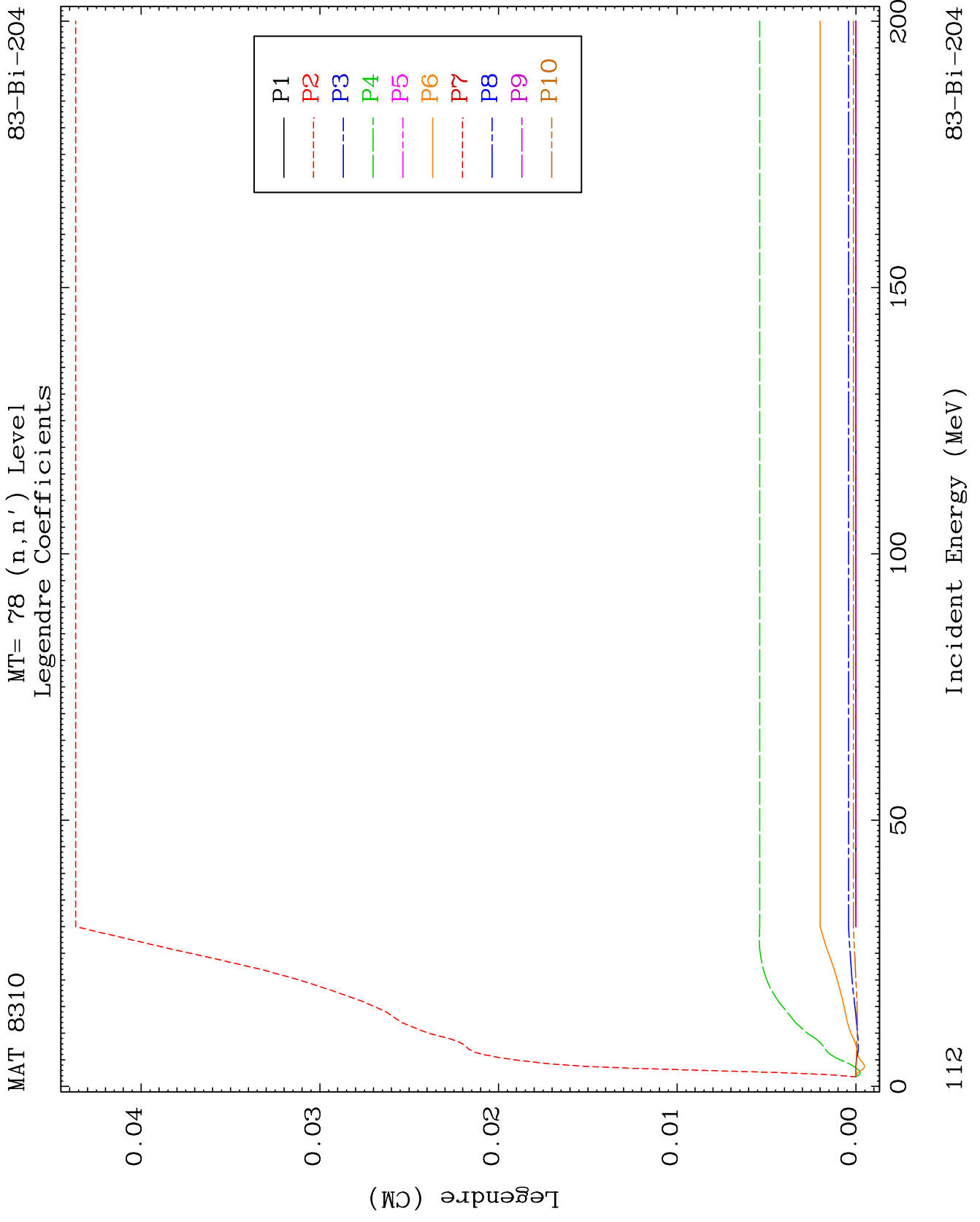


110

Incident Energy (MeV)

83-Bi-204

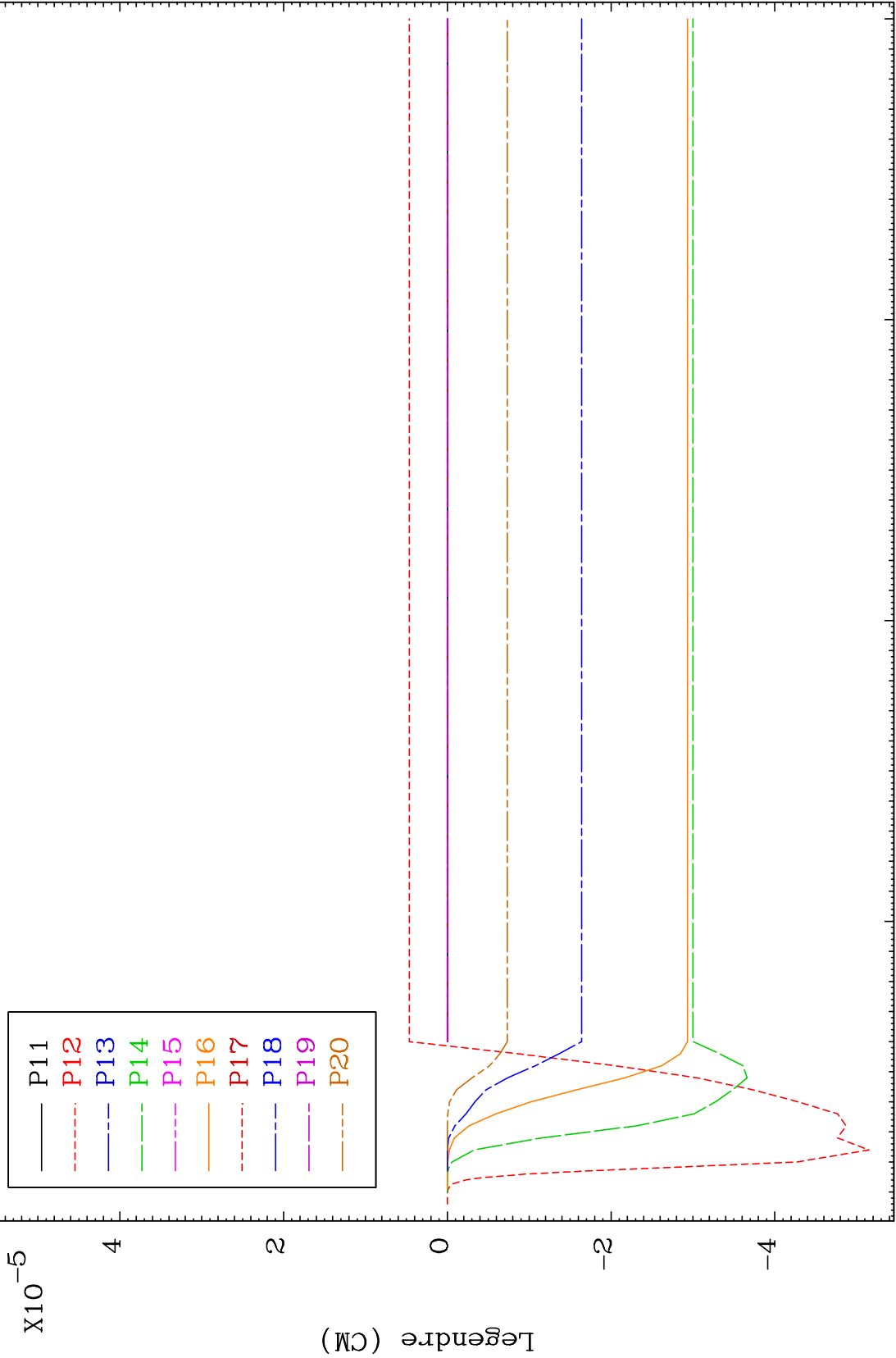
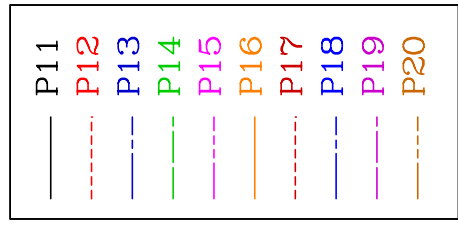




MAT 8310

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

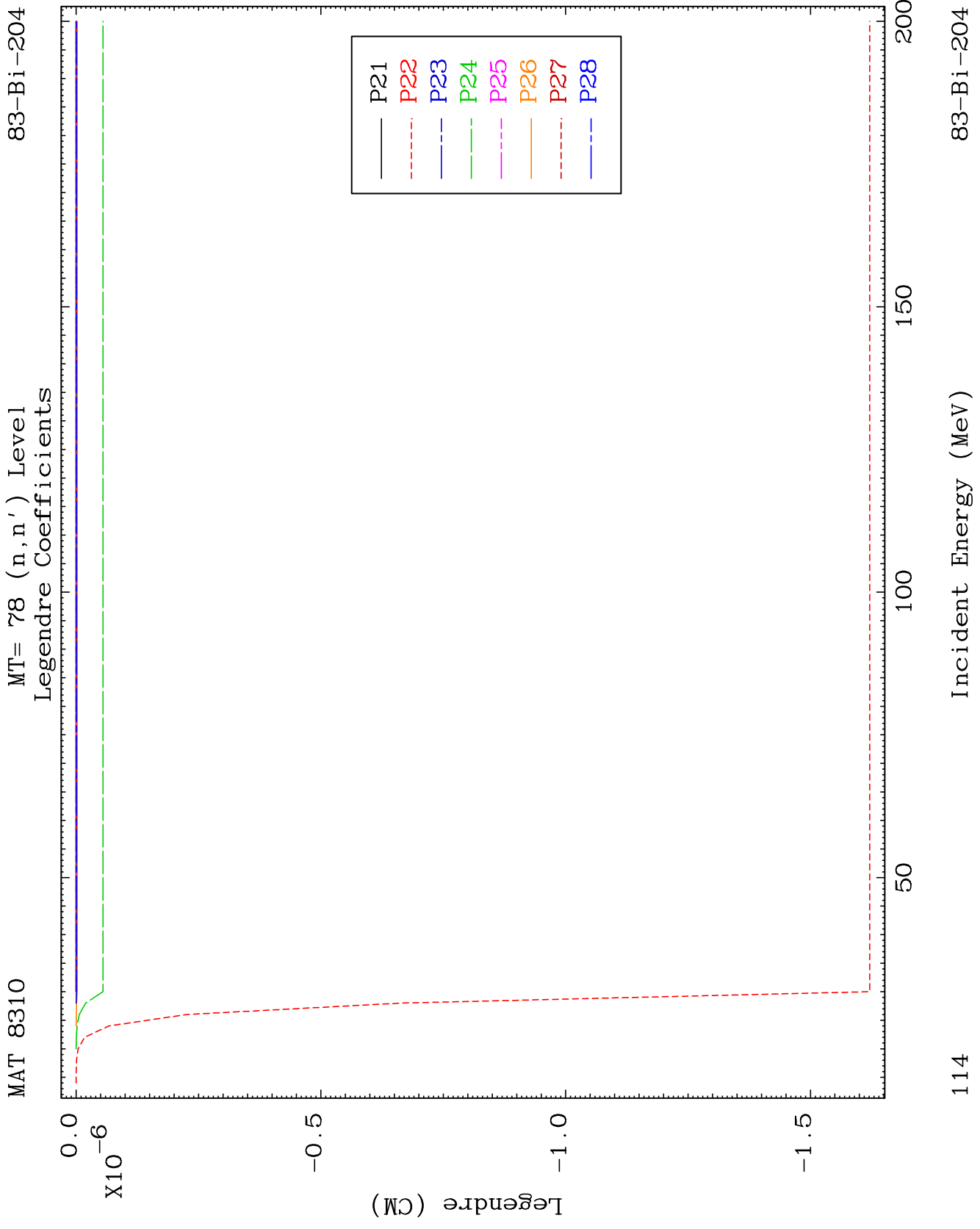
83-Bi-204



113

Incident Energy (MeV)

83-Bi-204

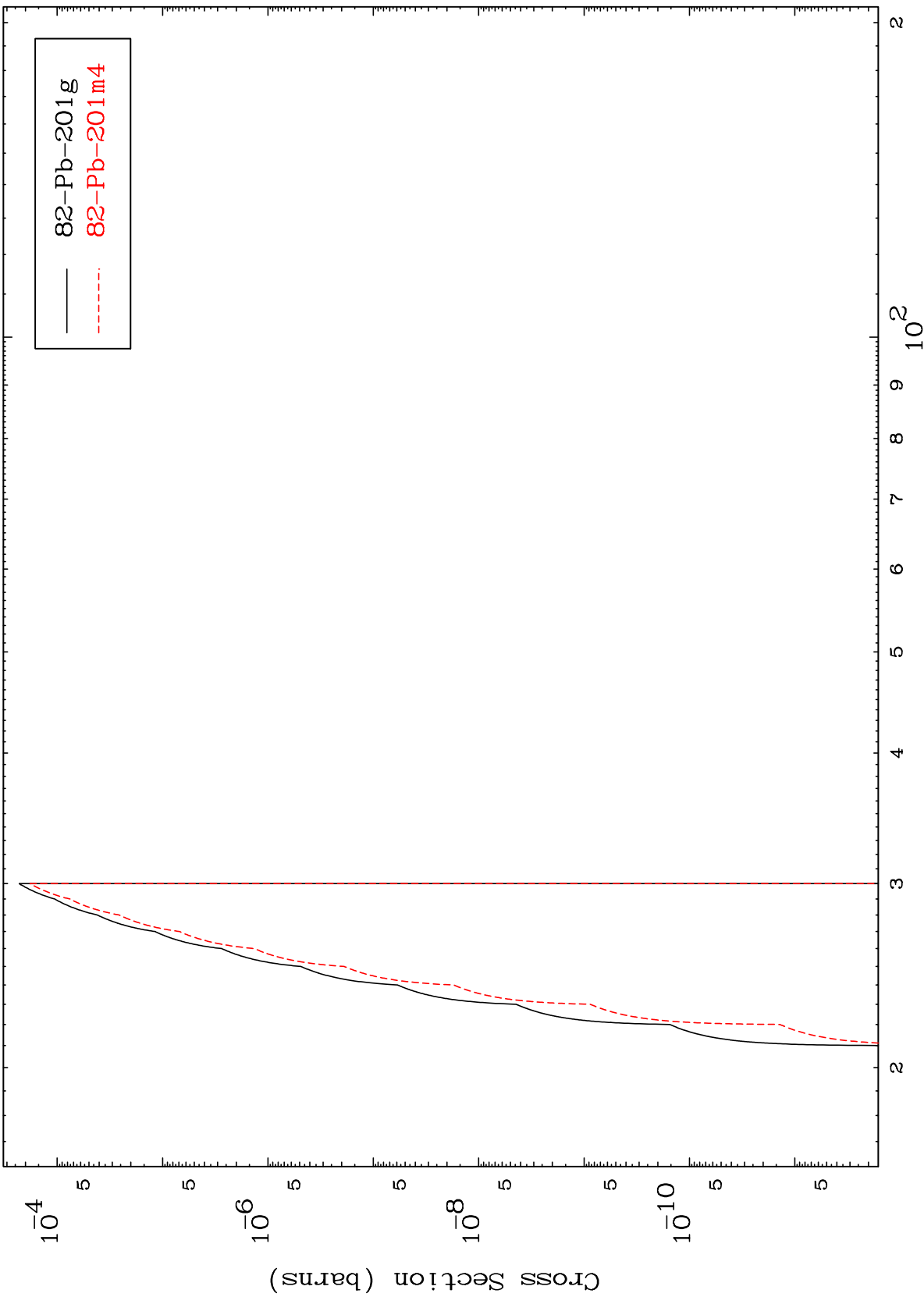


MAT 8310

(n,2n) d

83-Bi-204

Radionuclide Production Cross Section



115

Incident Energy (MeV)

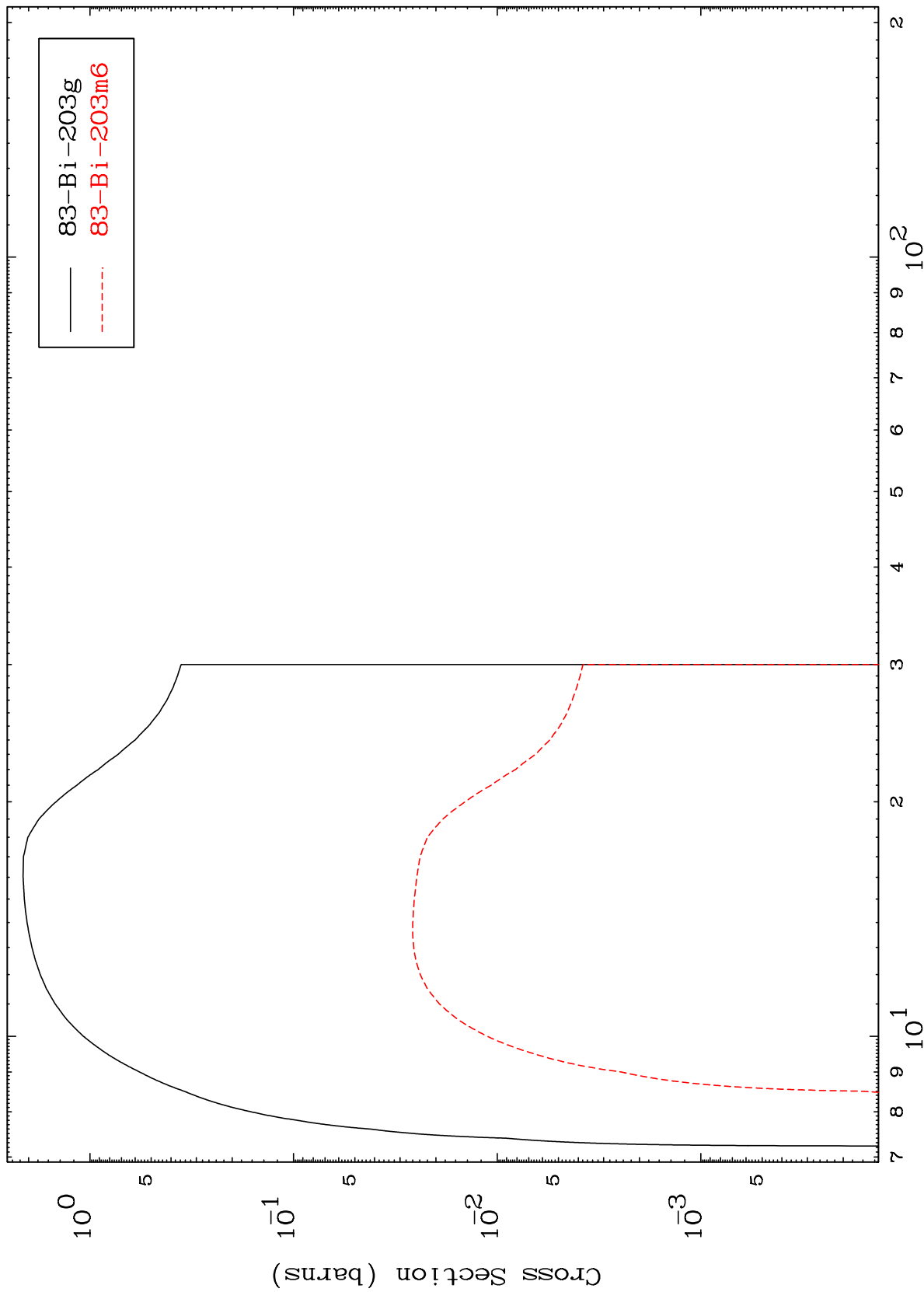
83-Bi-204

MAT 8310

83-Bi-204

(n,2n)

Radionuclide Production Cross Section



116

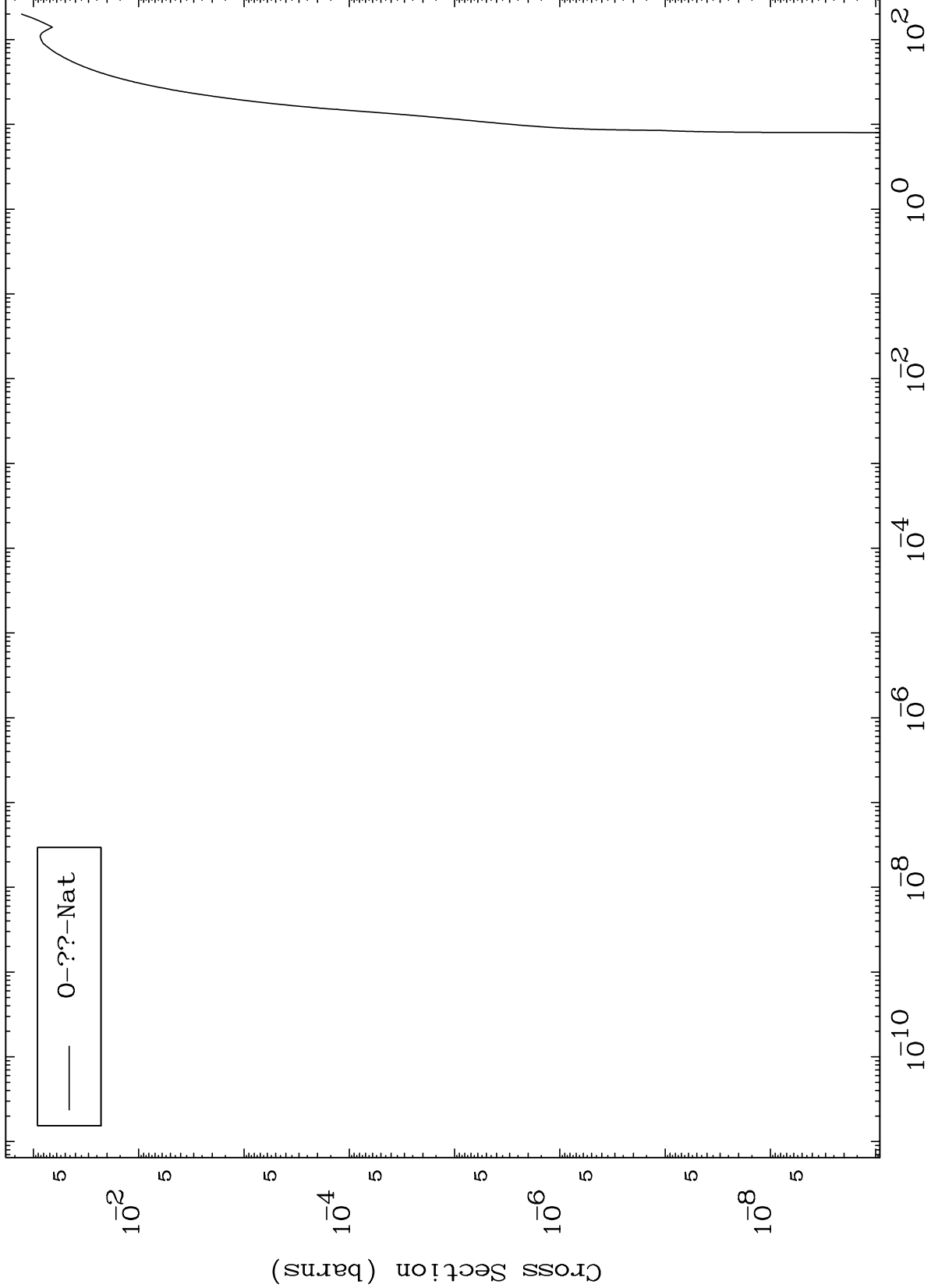
Incident Energy (MeV)

83-Bi-204

MAT 8310

Fission
Radionuclide Production Cross Section

83-Bi-204



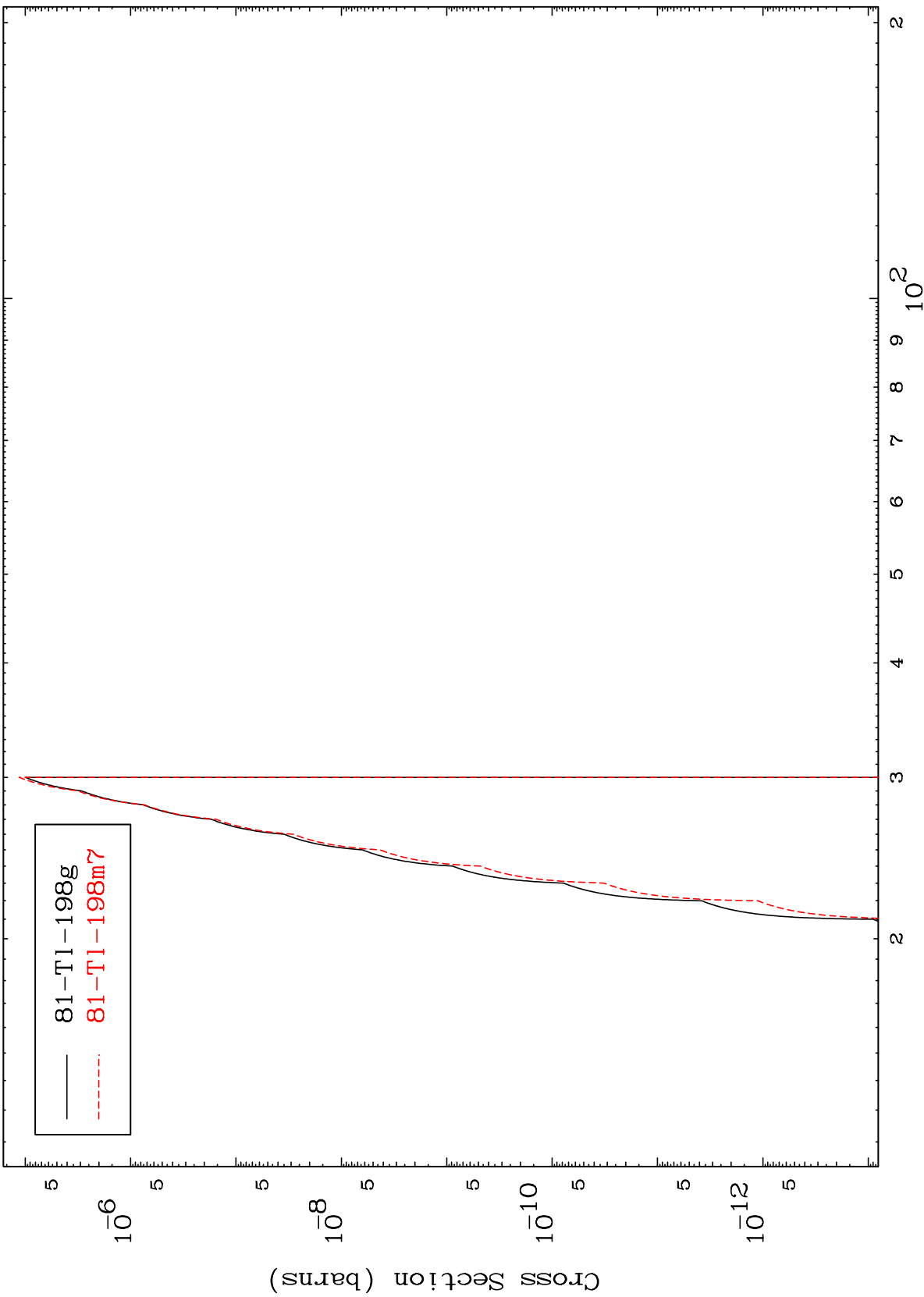
83-Bi-204

MAT 8310

(n,3n) α

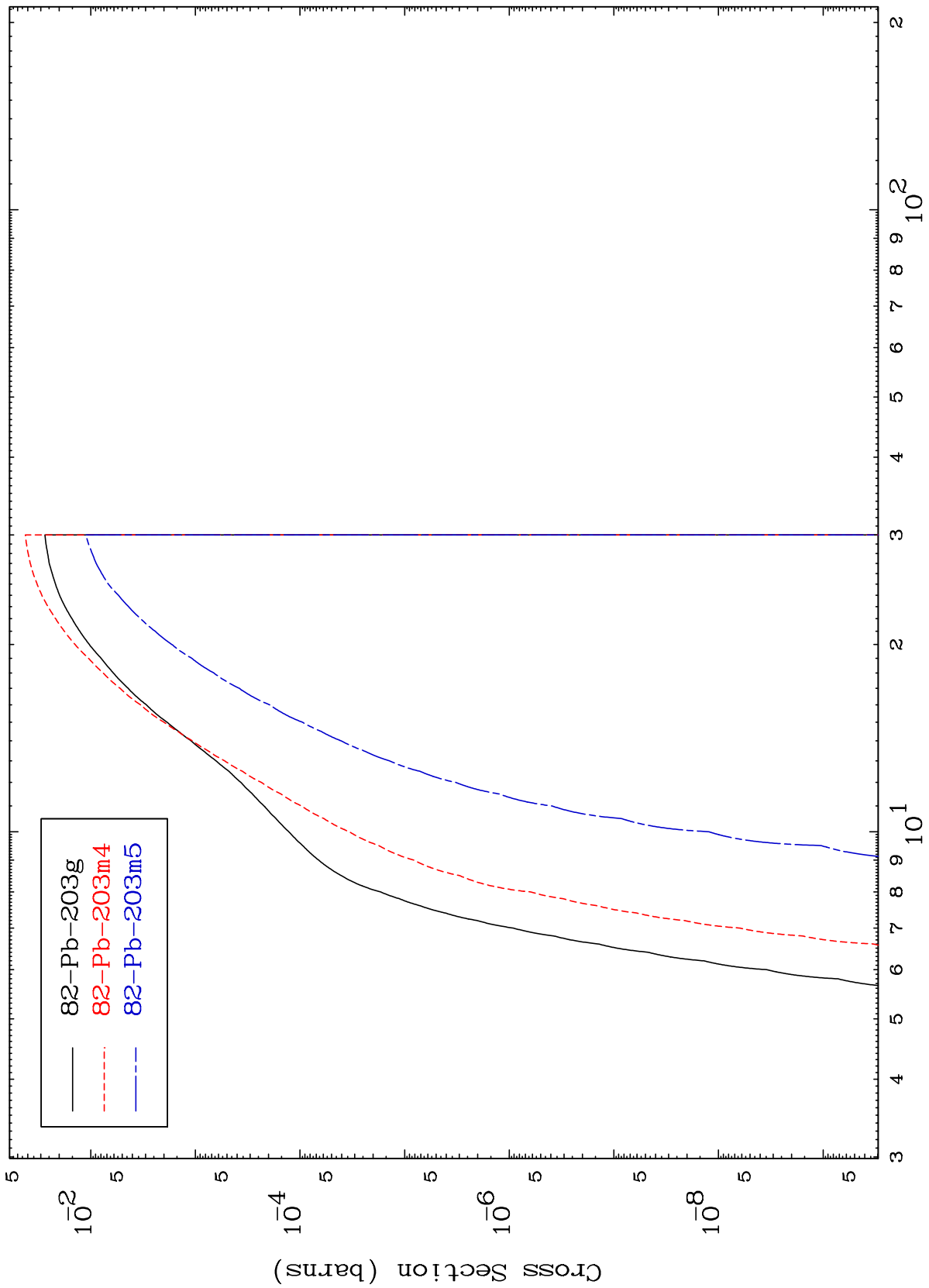
83-Bi-204

Radionuclide Production Cross Section



(n,n') p

Radionuclide Production Cross Section

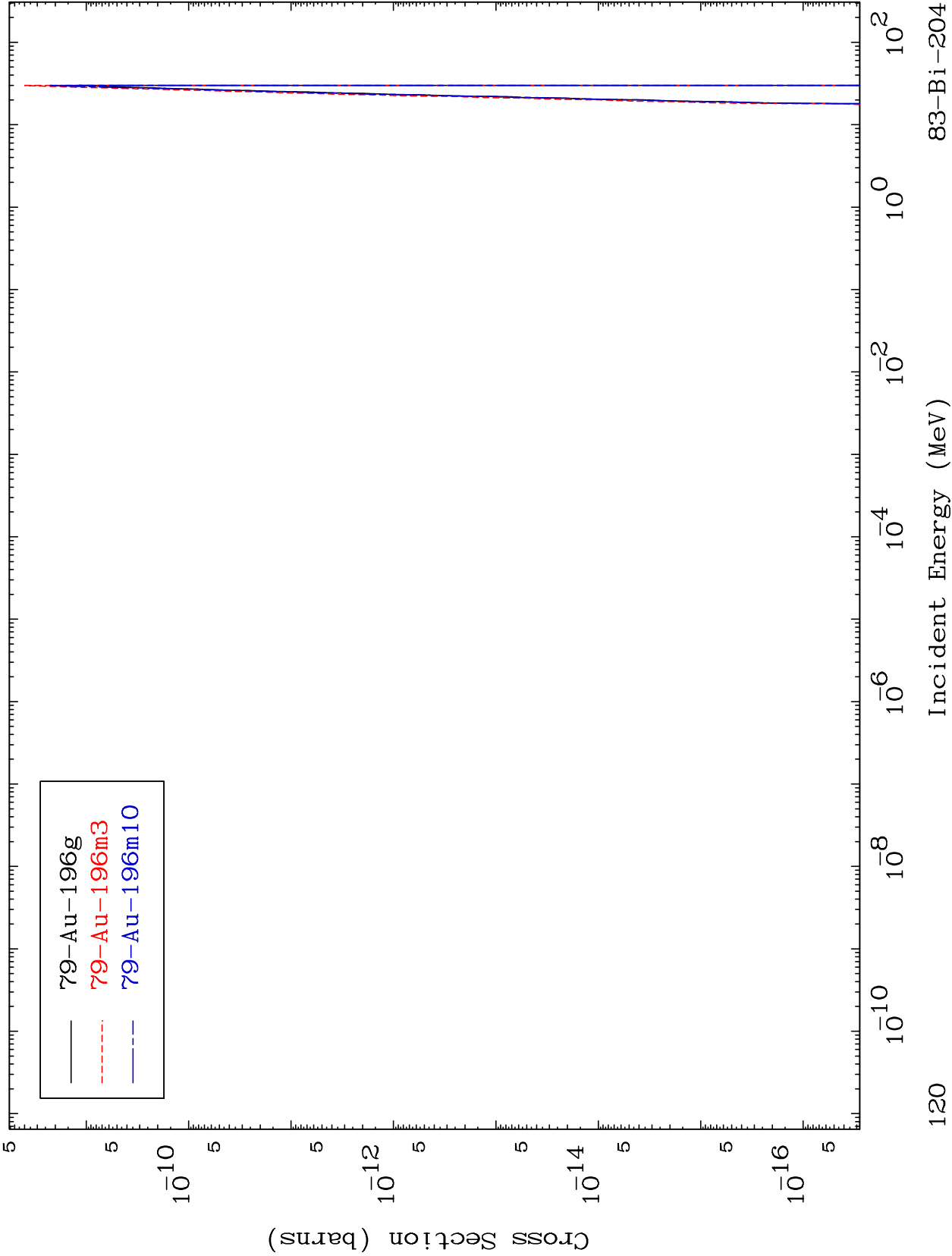


MAT 8310

(n,n') 2 α

83-Bi-204

Radionuclide Production Cross Section



120

Incident Energy (MeV)

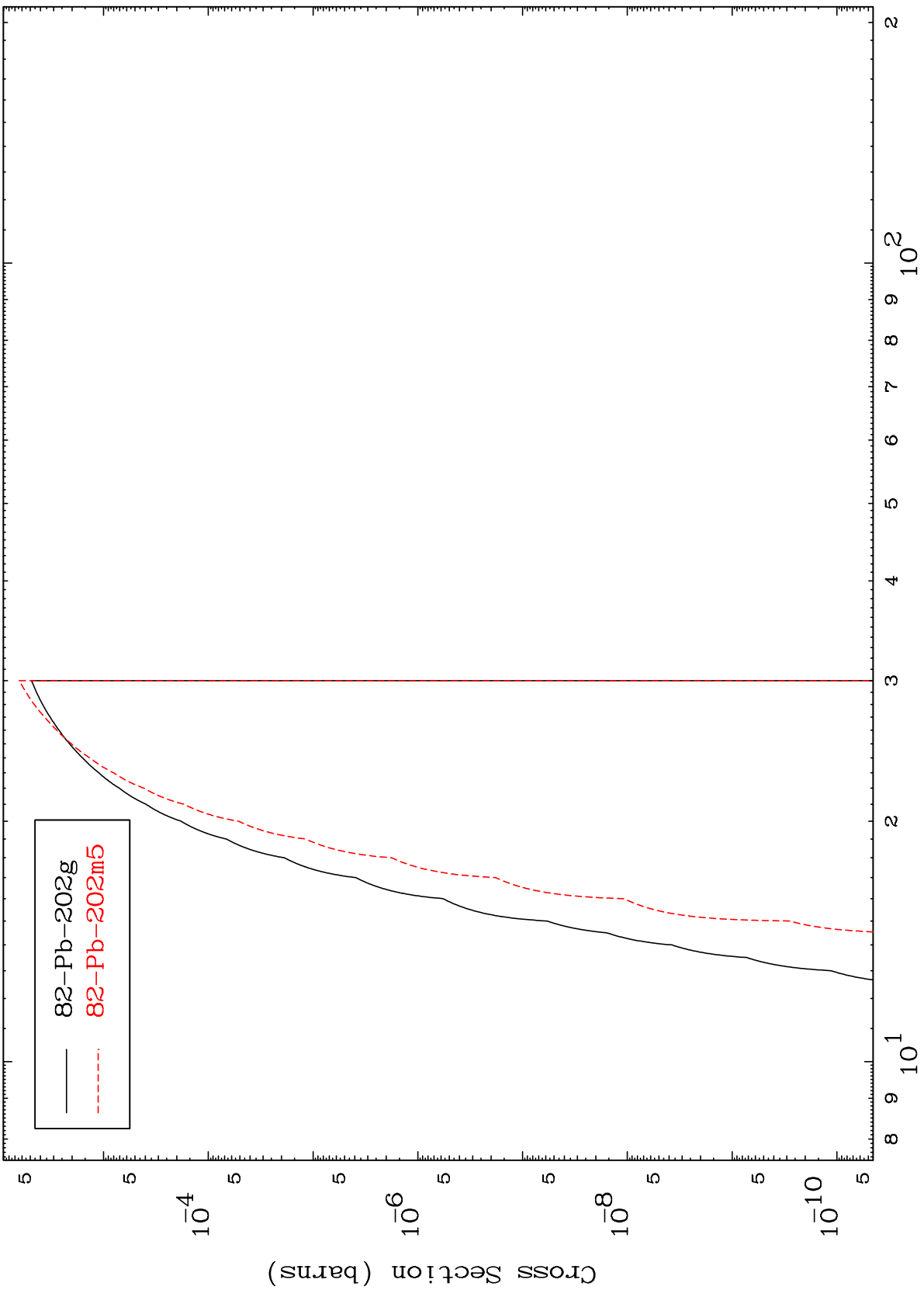
83-Bi-204

MAT 8310

(n,n') d

83-Bi-204

Radionuclide Production Cross Section



82-Pb-202g
82-Pb-202m5

121

Incident Energy (MeV)

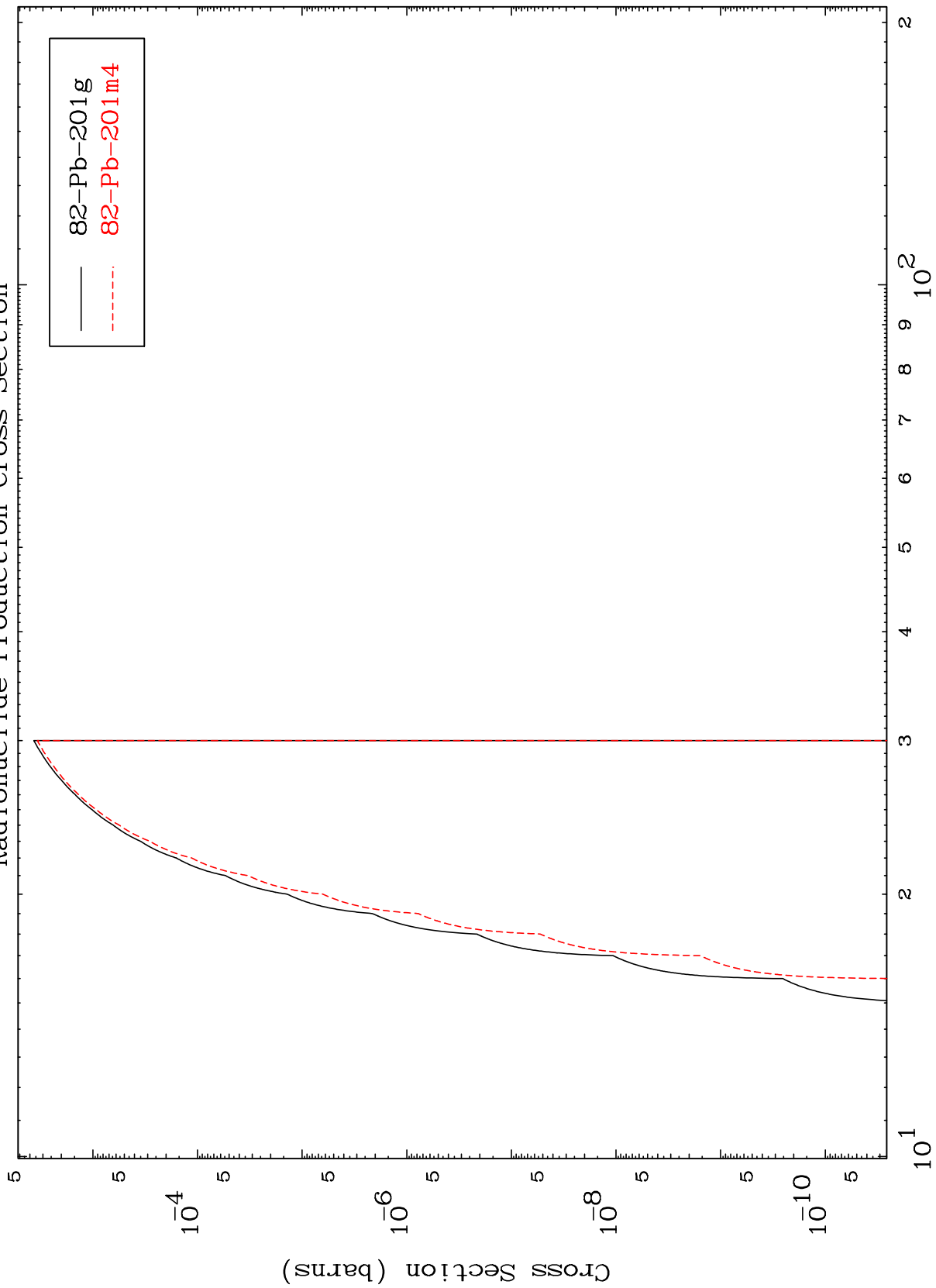
83-Bi-204

MAT 8310

(n,n') t

83-Bi-204

Radionuclide Production Cross Section



122

Incident Energy (MeV)

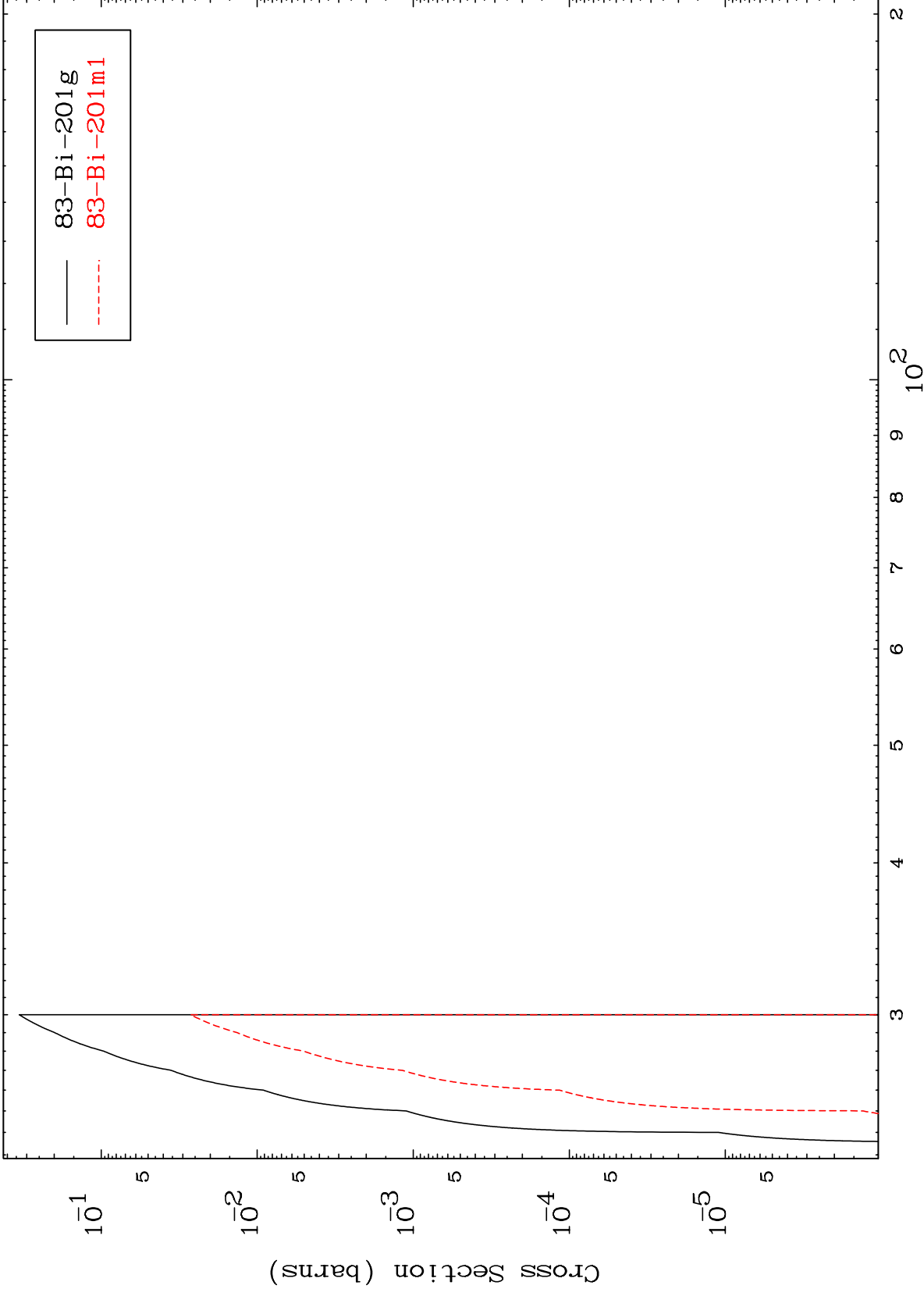
83-Bi-204

MAT 8310

(n,4n)

83-Bi-204

Radionuclide Production Cross Section



83-Bi-201g
83-Bi-201m1

123

Incident Energy (MeV)

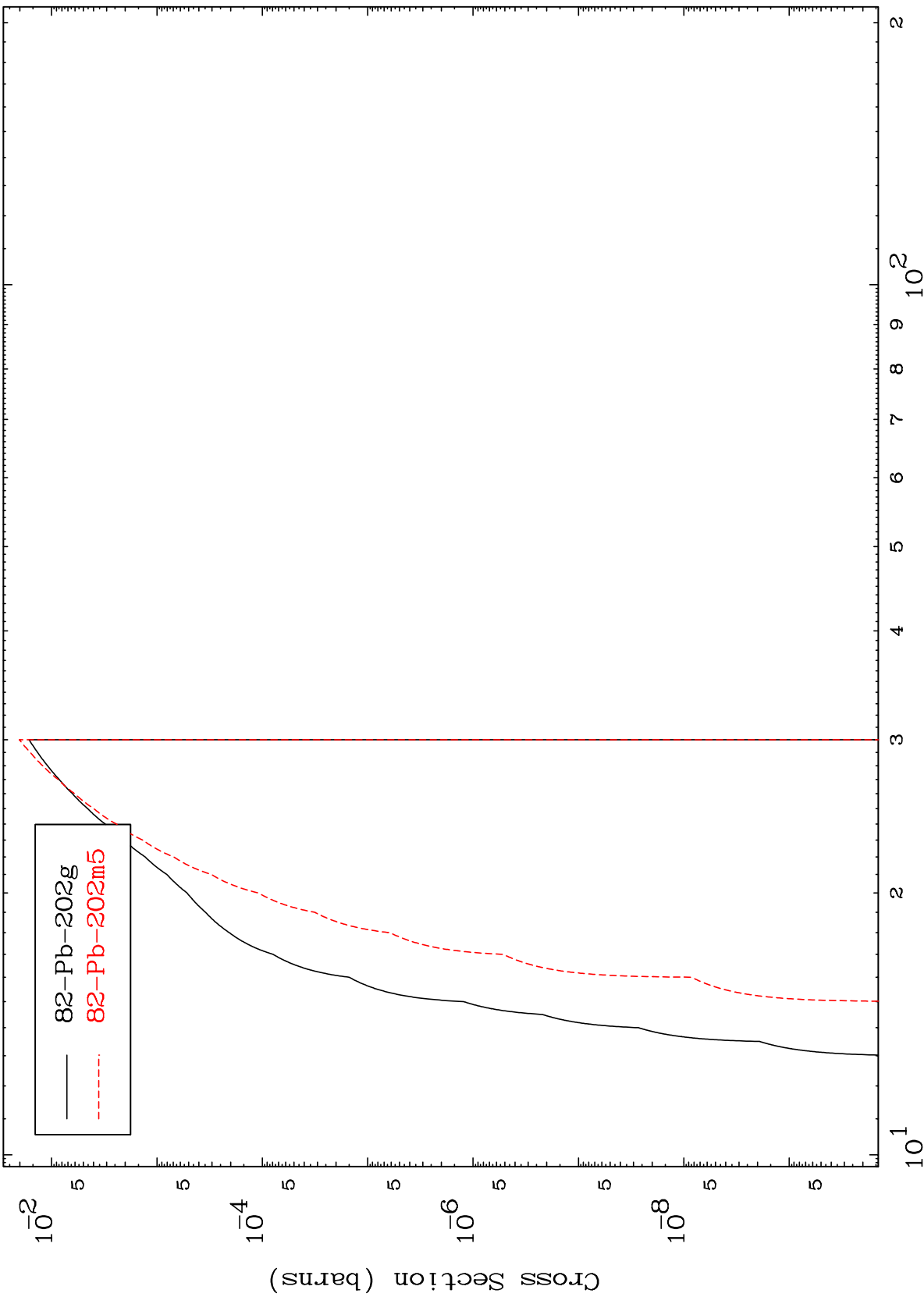
83-Bi-204

MAT 8310

(n,2n) p

83-Bi-204

Radionuclide Production Cross Section



124

Incident Energy (MeV)

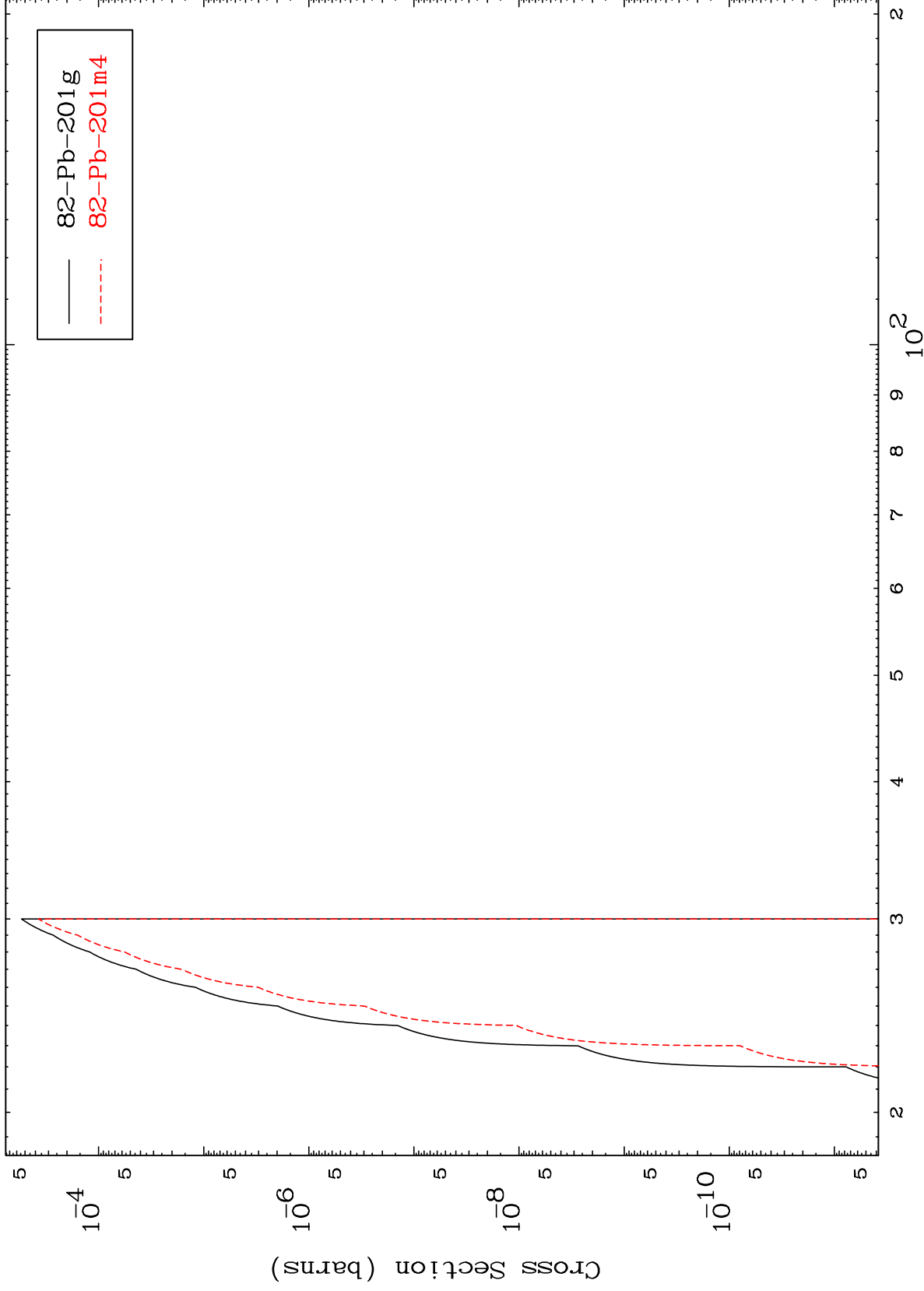
83-Bi-204

MAT 8310

(n,3n) p

83-Bi-204

Radionuclide Production Cross Section



125

Incident Energy (MeV)

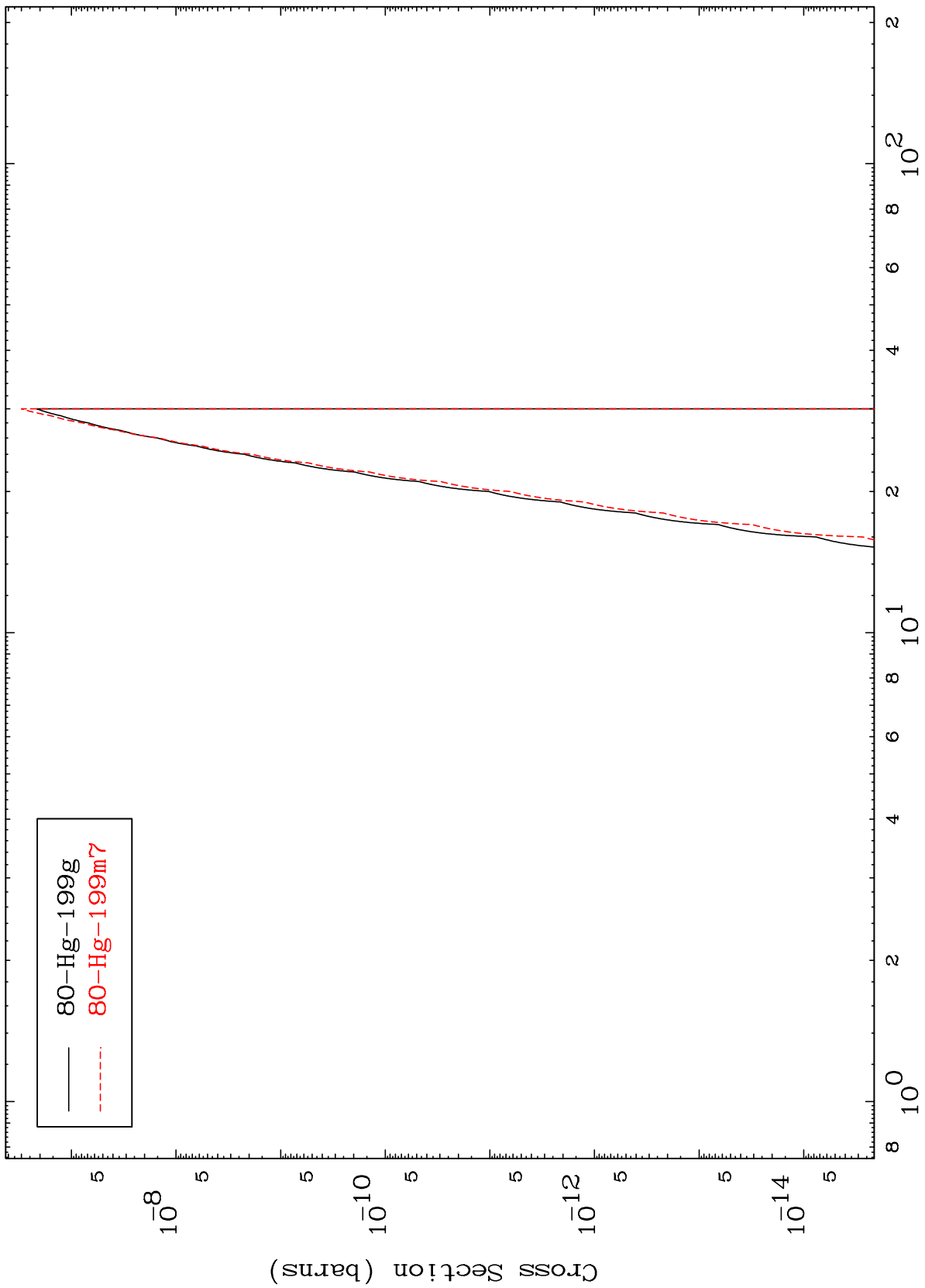
83-Bi-204

MAT 8310

(n,n') p α

83-Bi-204

Radionuclide Production Cross Section



126

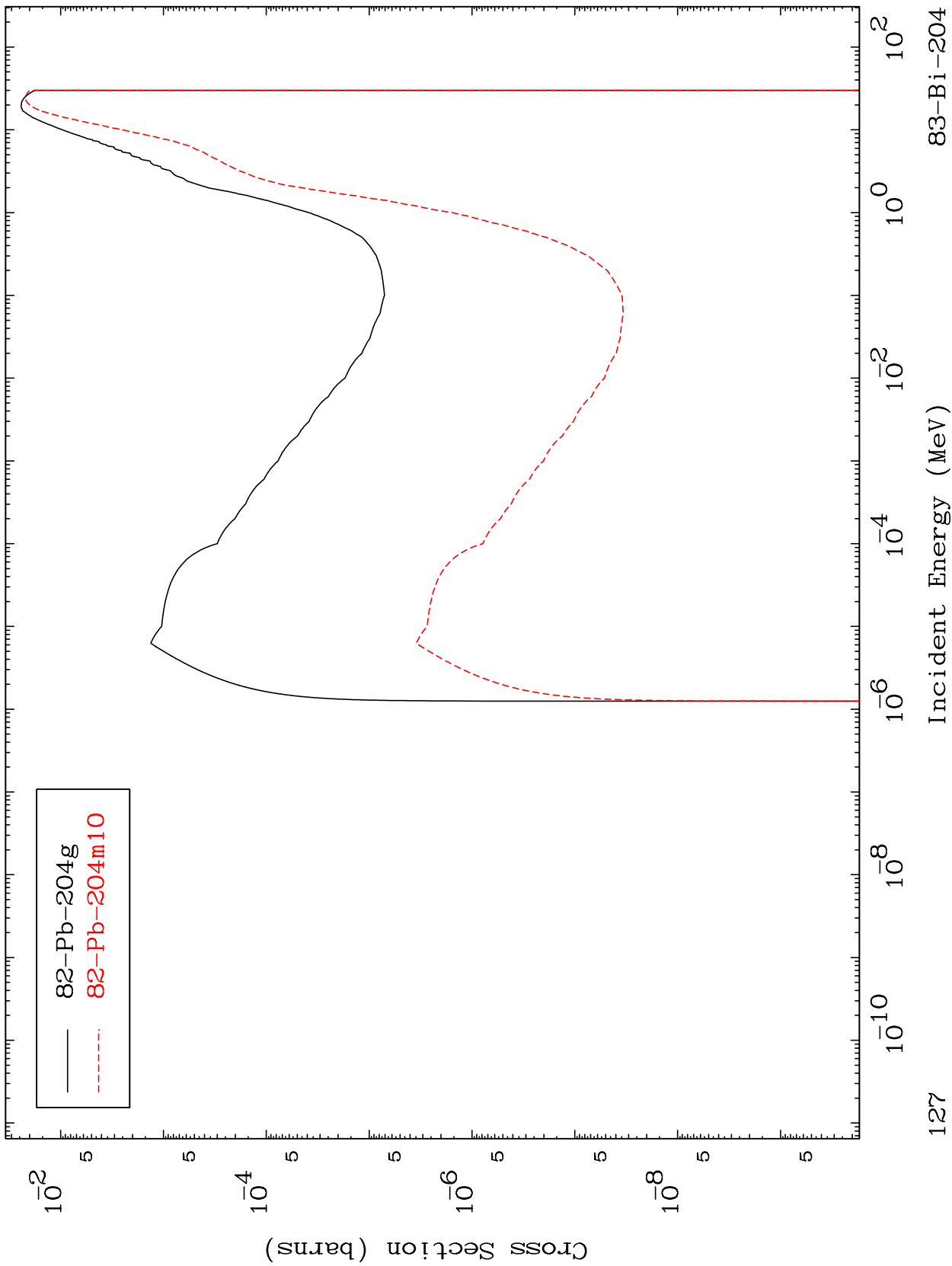
Incident Energy (MeV)

83-Bi-204

MAT 8310

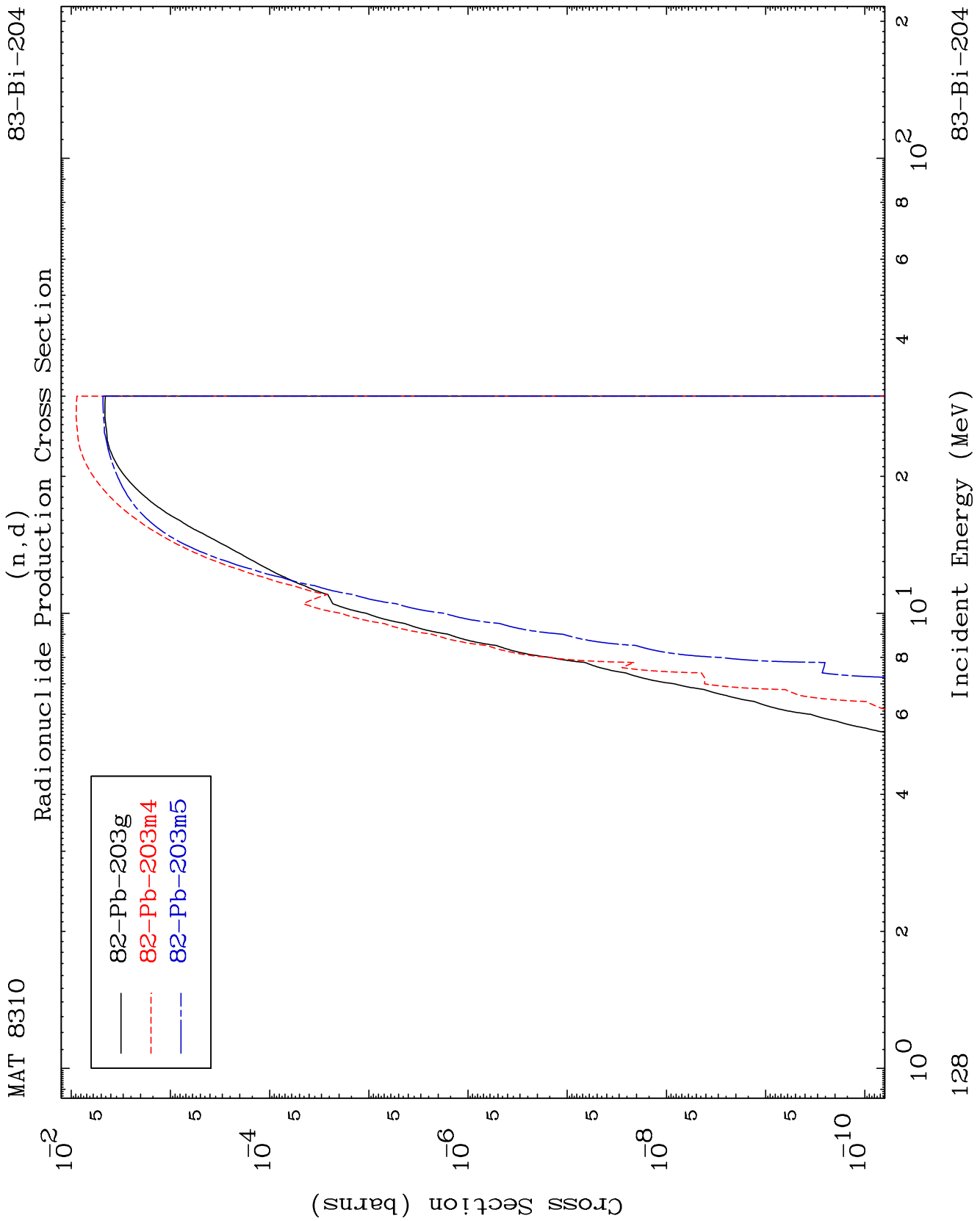
83-Bi-204

(n,p)
Radionuclide Production Cross Section



127

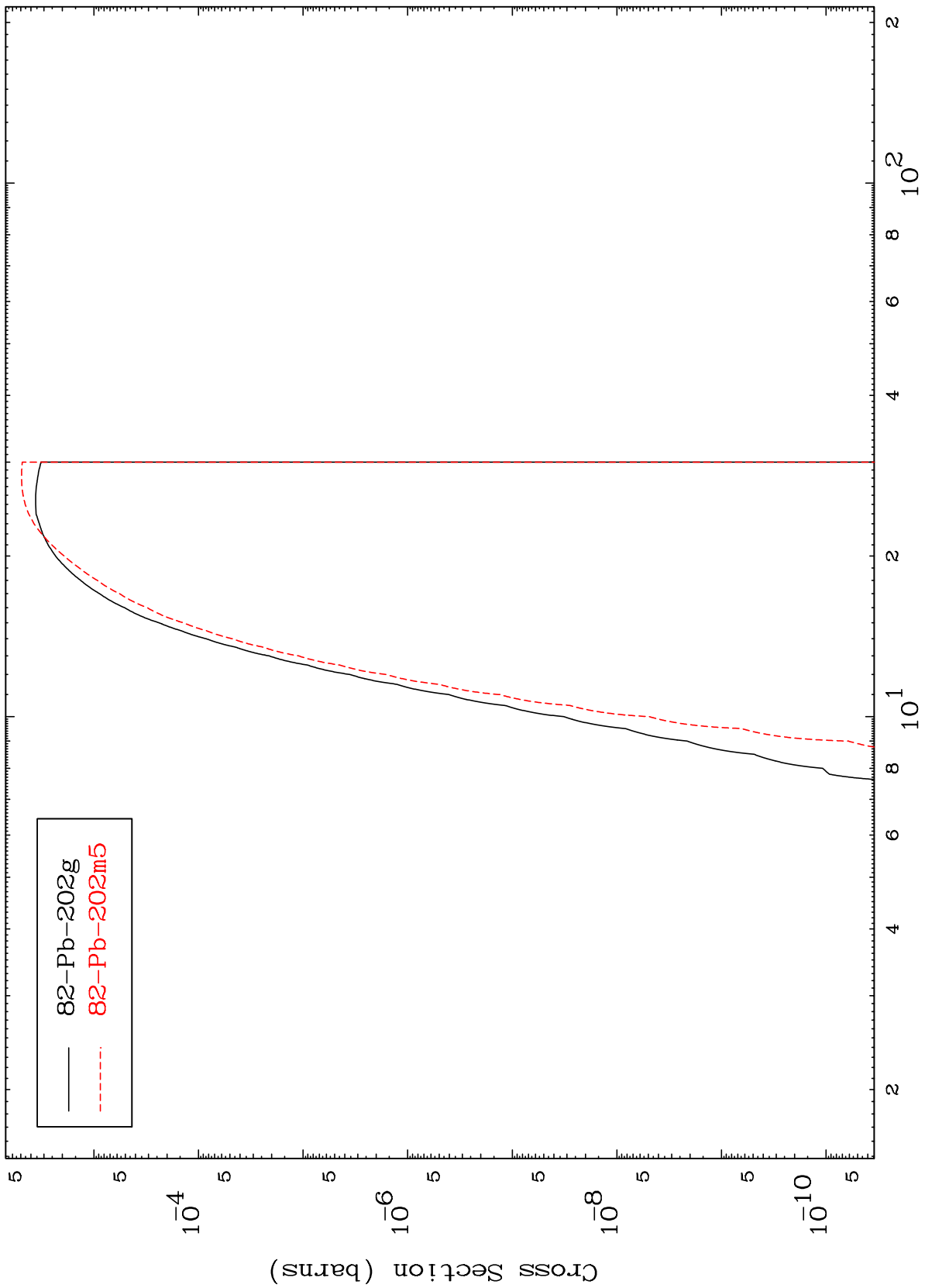
83-Bi-204



MAT 8310

83-Bi-204

(n, t)
Radionuclide Production Cross Section



129

83-Bi-204

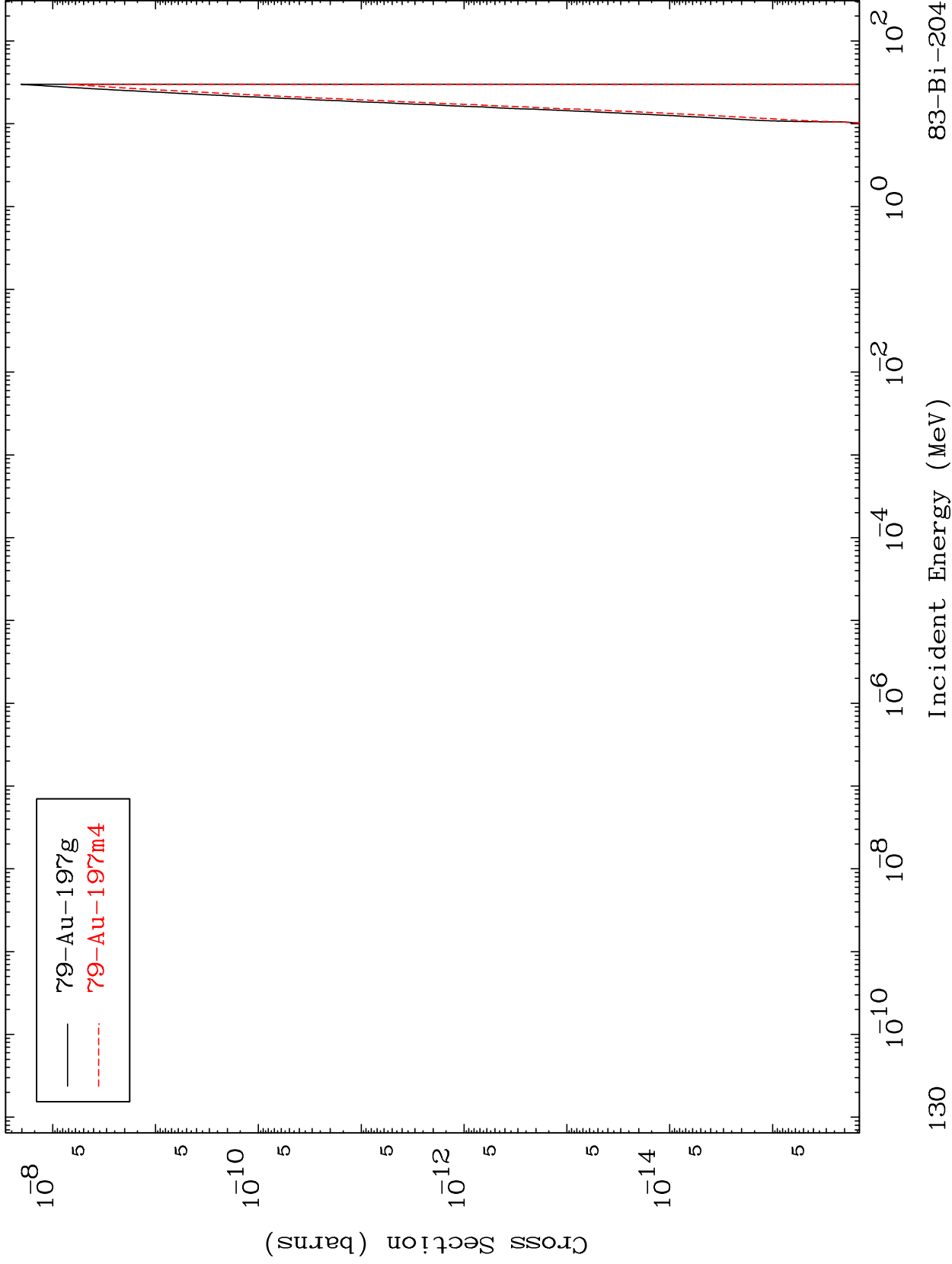
Incident Energy (MeV)

MAT 8310

$(n, 2\alpha)$

83-Bi-204

Radionuclide Production Cross Section



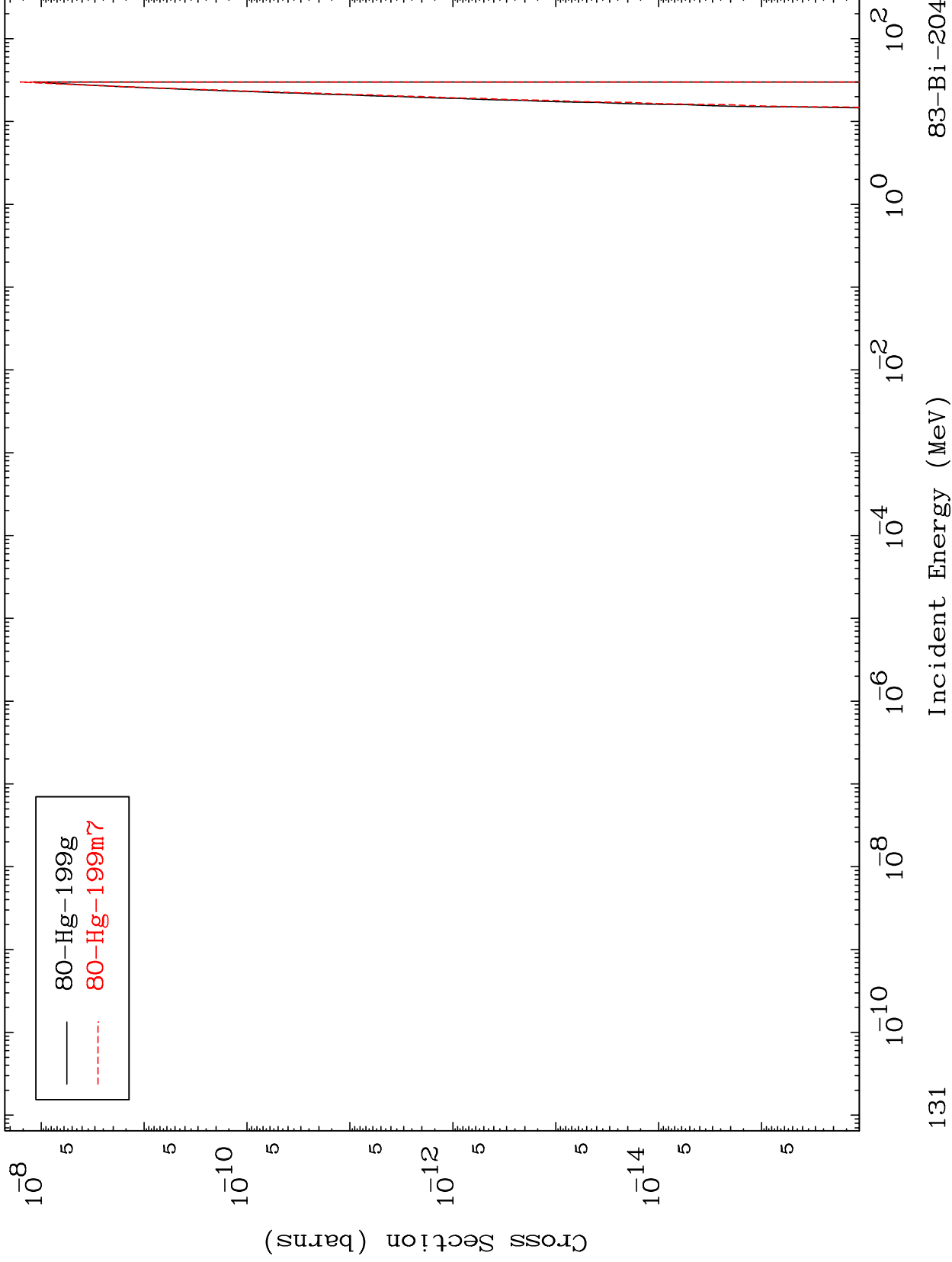
130

MAT 8310

(n,d) α

83-Bi-204

Radionuclide Production Cross Section



131