

# Status

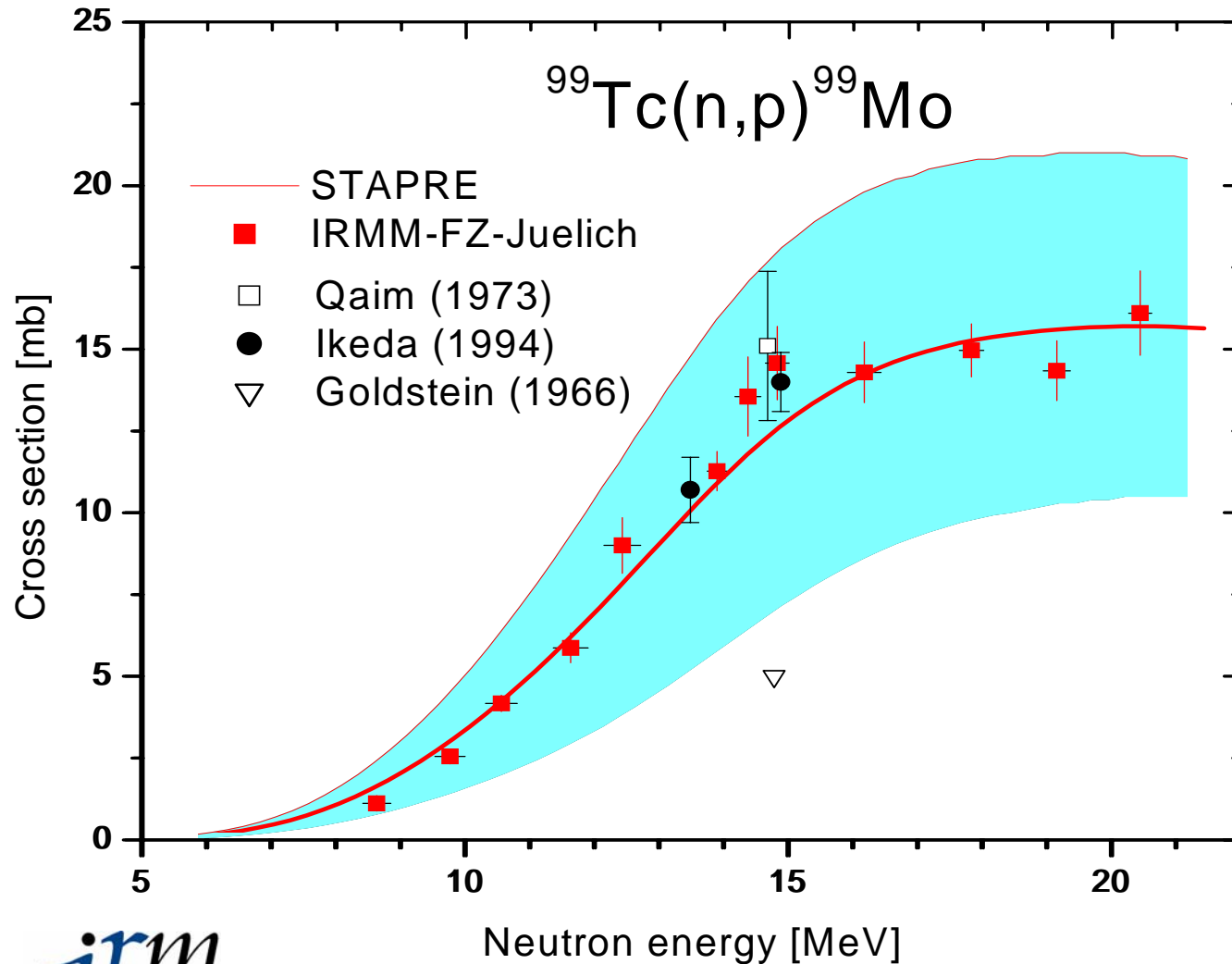
of the  
preparation of the report for

## OECD-NEA WPEC subgroup 19 on Activation Cross Sections

25 May 2004

# Summary

- Subgroup activities were ended
- Conclusions
- Sensitivity studies and data uncertainties
- In preparation: graphs with comparison to most recent evaluations and Talys calculation
- Empire calculations (M. Hermann, R. Capote-Noy) ?
- First draft of report (text): End of June
- First draft of contents CD: idem, except graphs
- Final graphs: End of July
- Final draft report: Mid September
- ...



$^{99}\text{Tc} \Delta a/a = 10\%$

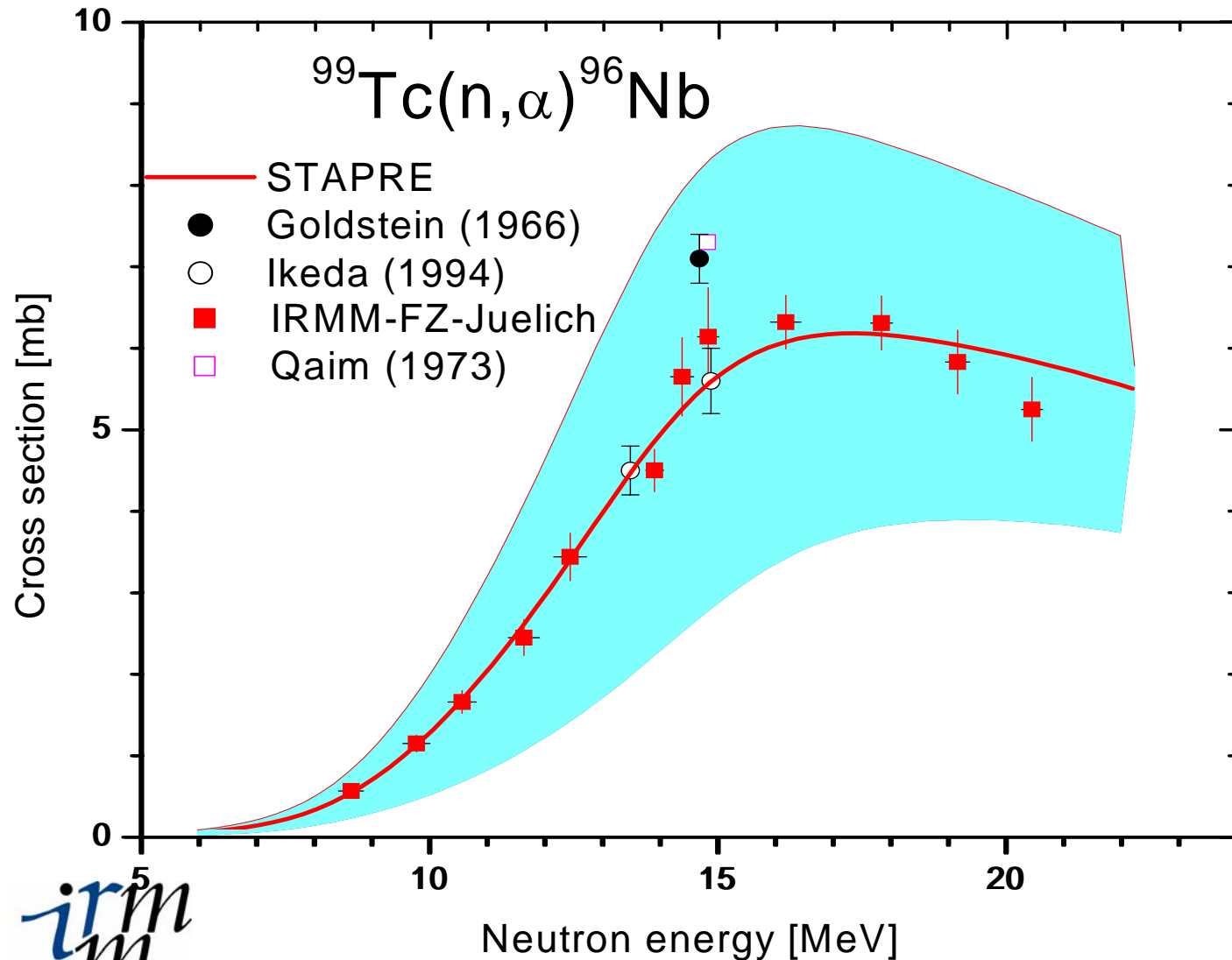
$^{99}\text{Mo} \Delta a/a = 10\%$

$^{99}\text{Tc} \Delta \text{abs}/\text{abs} = 5\%$

$^{99}\text{Tc} \Delta \text{FM}/\text{FM} = 10\%$

$^{99}\text{Tc} \Delta = \pm 0.2 \text{ MeV}$

# Sensitivity study (SS)



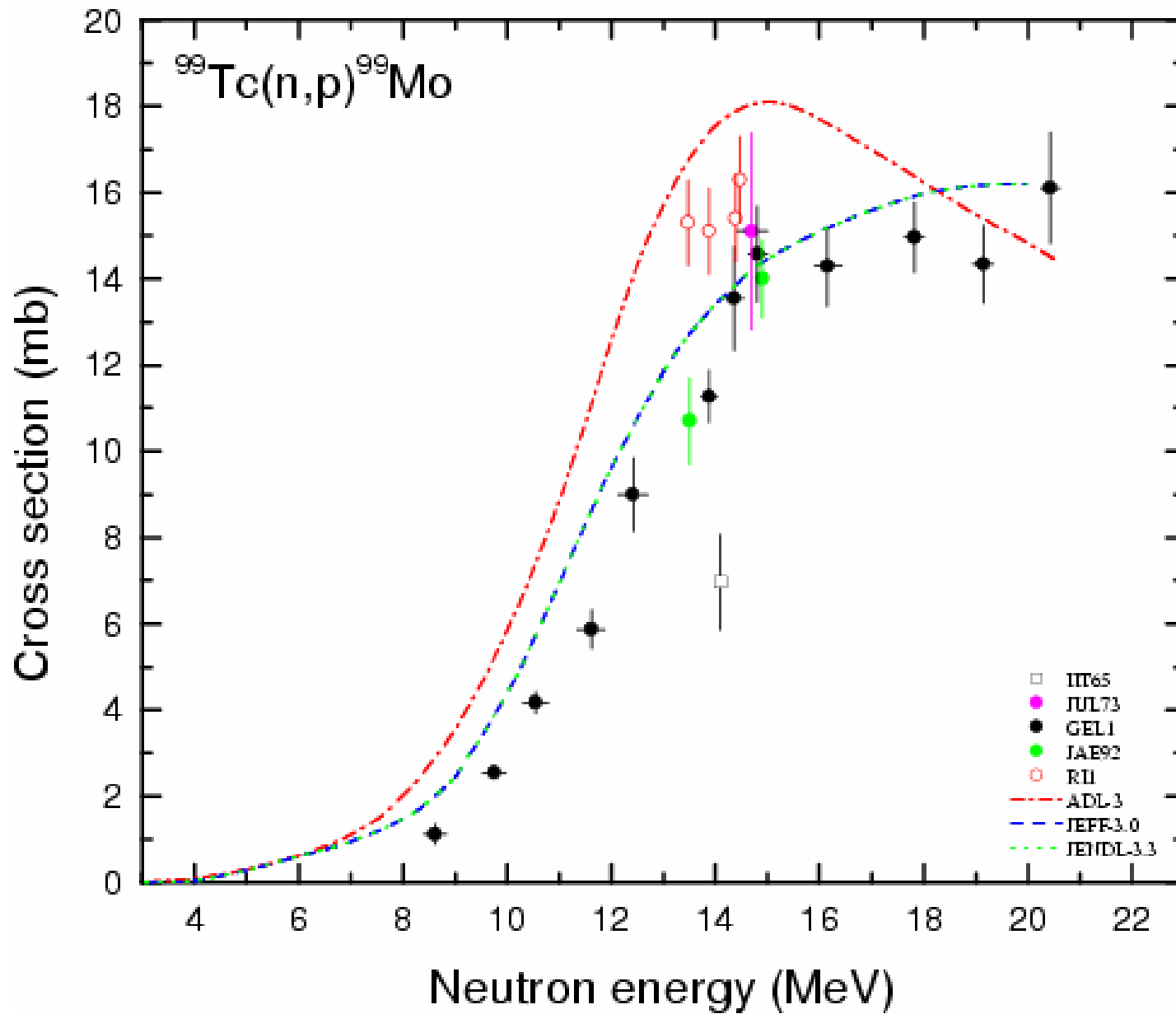
$^{99}\text{Tc}$   $\Delta a/a=10\%$

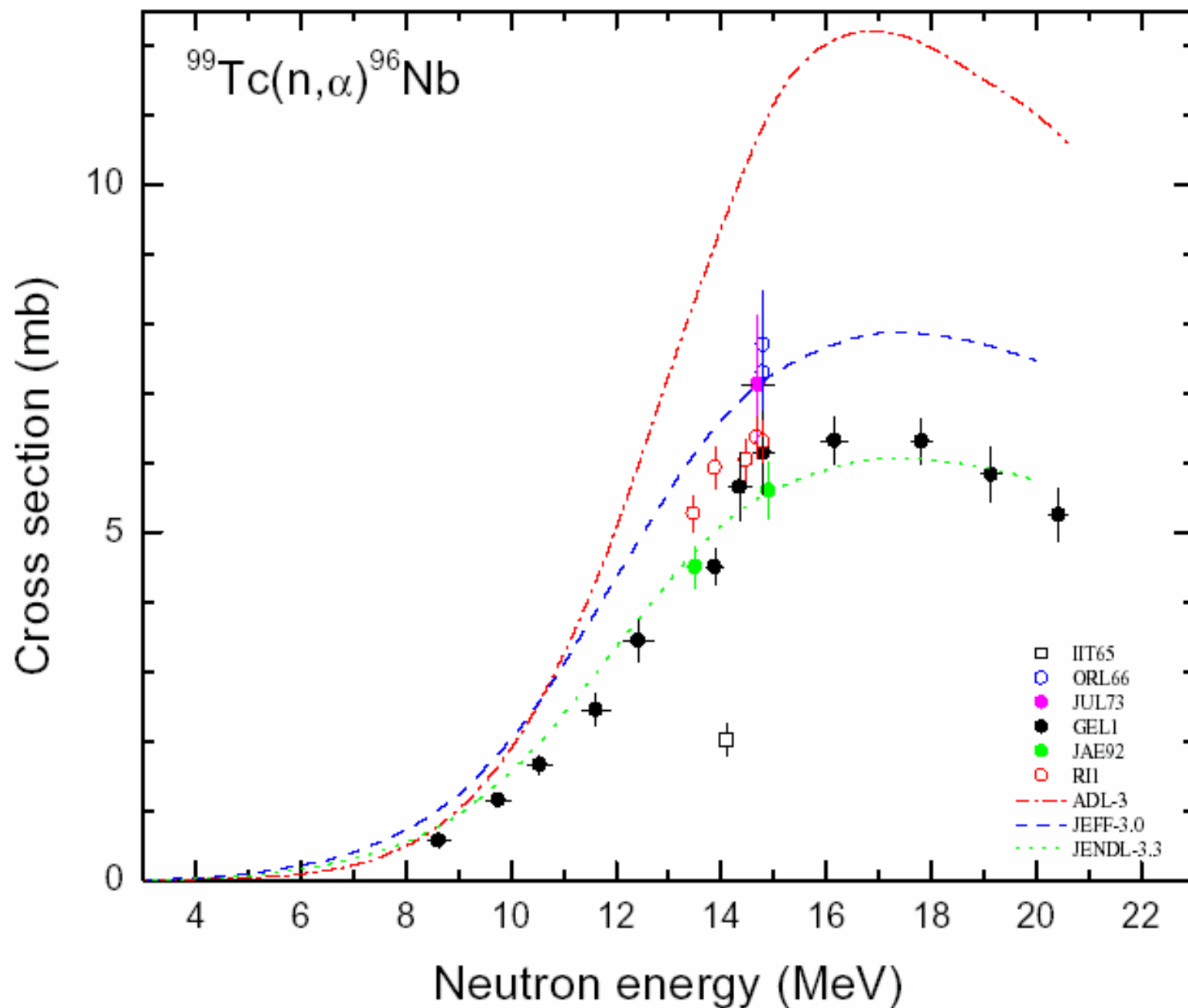
$^{96}\text{Nb}$   $\Delta a/a=10\%$

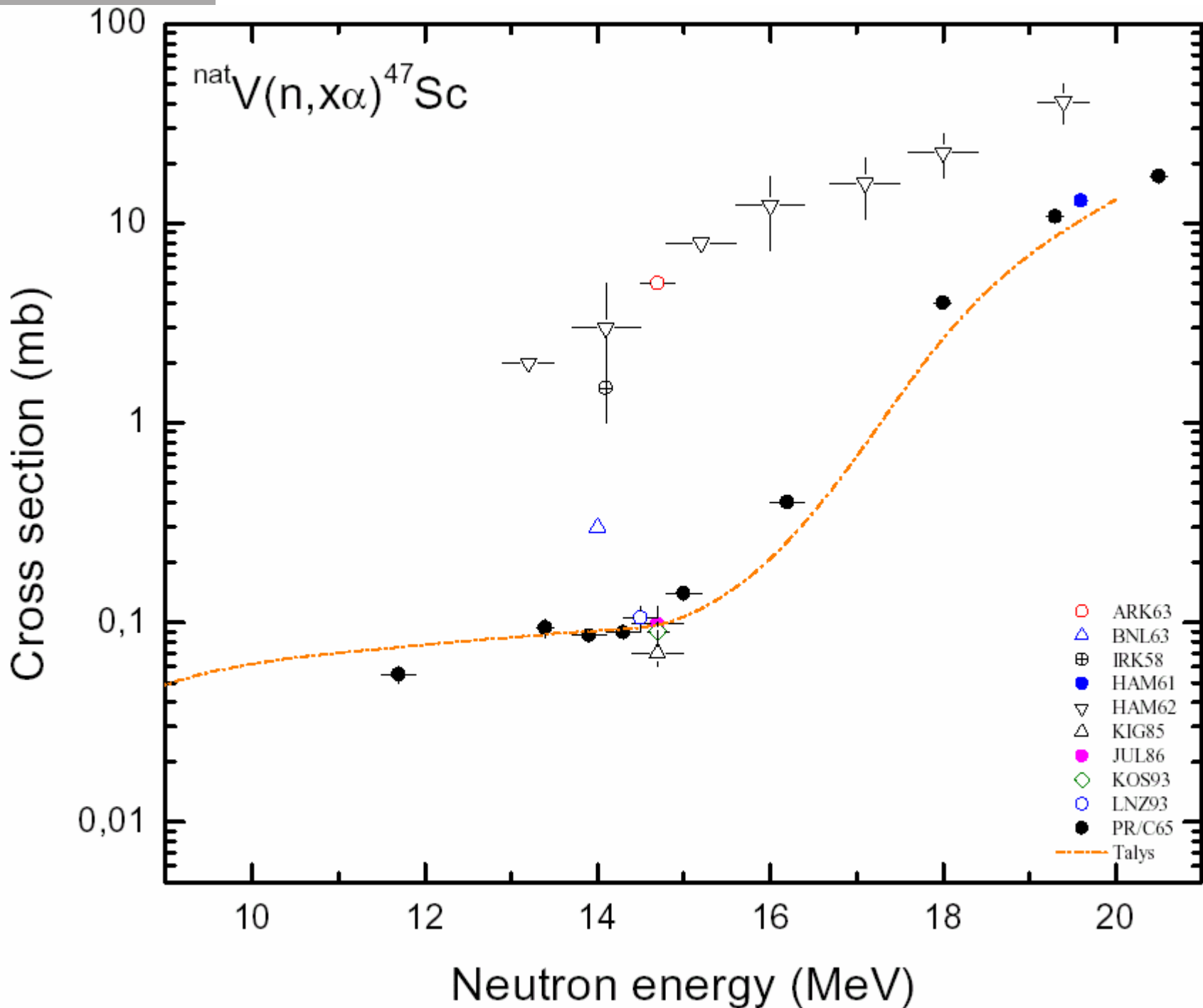
$^{99}\text{Tc}$   $\Delta \text{abs}/\text{abs} = 5\%$

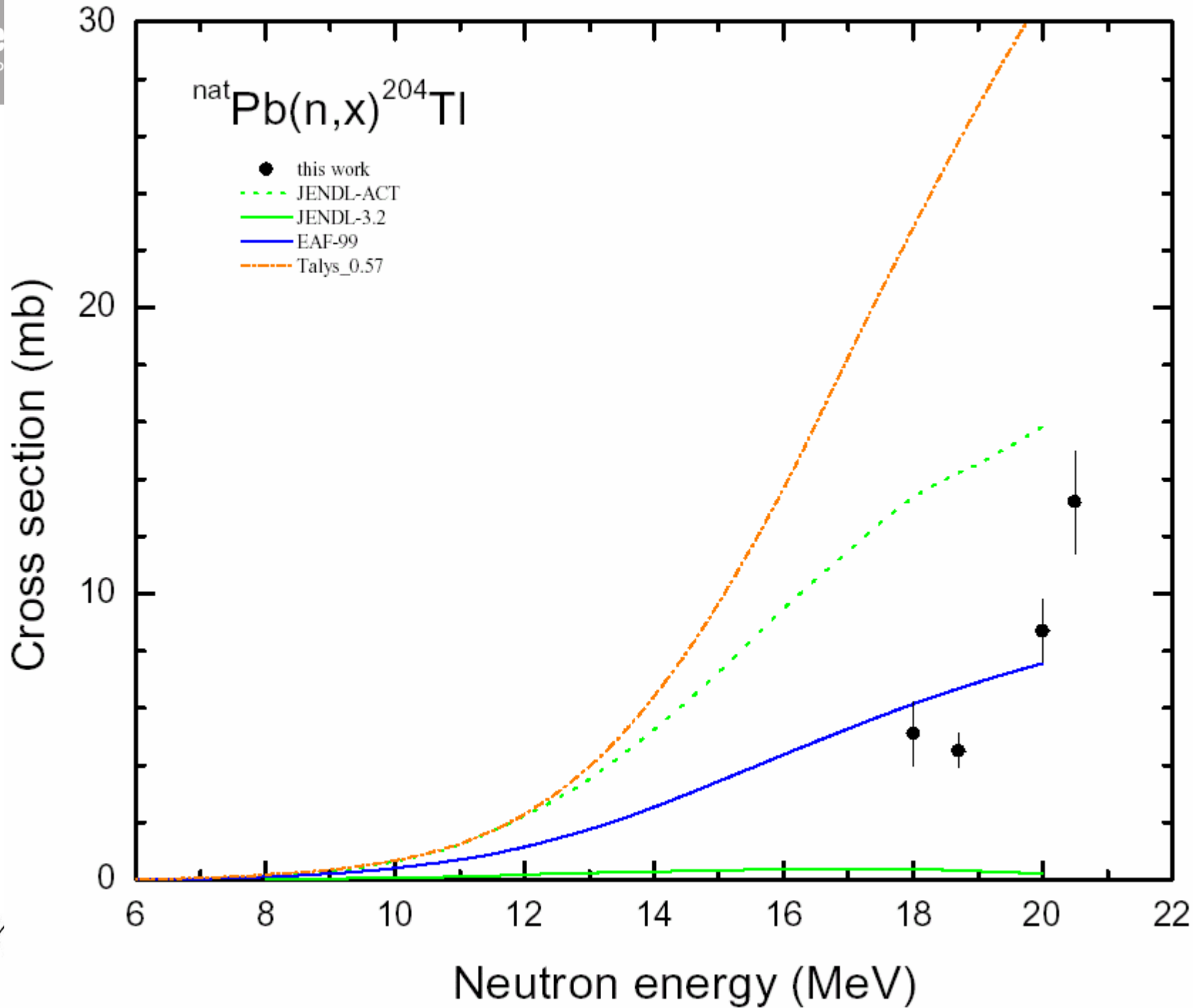
$^{99}\text{Tc}$   $\Delta \text{FM}/\text{FM} = 10\%$

$^{96}\text{Nb}$   $\Delta = \pm 0.2 \text{ MeV}$



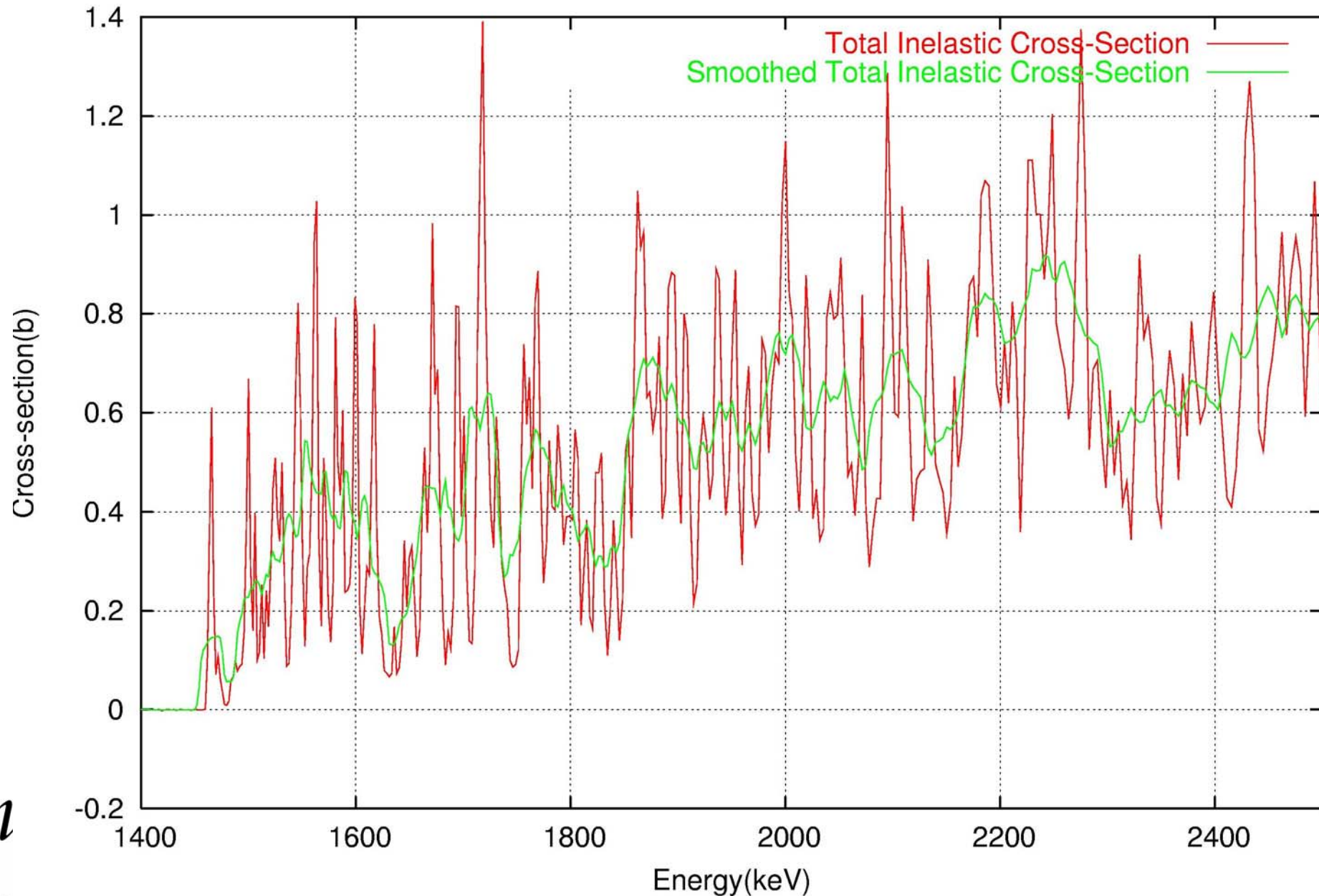






- Ni data and modeling was published: Nuclear Physics A 730 (2004) 255–284
- Mo data and modeling: paper to be revised (discussion)
- $^{14}\text{N}(n,p)^{14}\text{C}$ ,  $^{52}\text{Cr}$ ,  $^{58}\text{Ni}(n,\alpha p)$ ,  $^{63}\text{Cu}(n,t)$
- Nemea workshop
  - Neutron measurements, evaluations and applications
  - Budapest 5-8 Nov 2003:
  - Proceedings: [www.irmm.jrc.be](http://www.irmm.jrc.be)
- Nemea-2
  - Bucharest 20-23 Oct 2004
  - HH-IFIN, Prof. Dragulescu
  - [www.irmm.jrc.be](http://www.irmm.jrc.be)
  - abstracts 31 July 2004
- Inelastic by  $(n,n'\gamma)$ 
  - method paper in print: NIM
  - $^{52}\text{Cr}$ ,  $^{58}\text{Ni}(n,n'\gamma)$  data completed
  - $^{207}\text{Pb}(n,2n\gamma)$ : feasible!
  - Setup&DAQ development
- Nudatra/IP-Eurotrans
  - Expt. LE+IE program: Pb,Bi  $(n,n')$ ,  $(n,n'\gamma)$ ,  $(n,xn\gamma)$
  - $^{241,243}\text{Am}$  capture
  - $^{242,244}\text{Cm}$  fission, transfer reaction
  - Start by Jan 2006?

# $^{52}\text{Cr}$ at high resolution $\sigma = \sigma_{\gamma\text{-prod}}$



# $^{52}\text{Cr}$ full range, total inelastic

