

Status

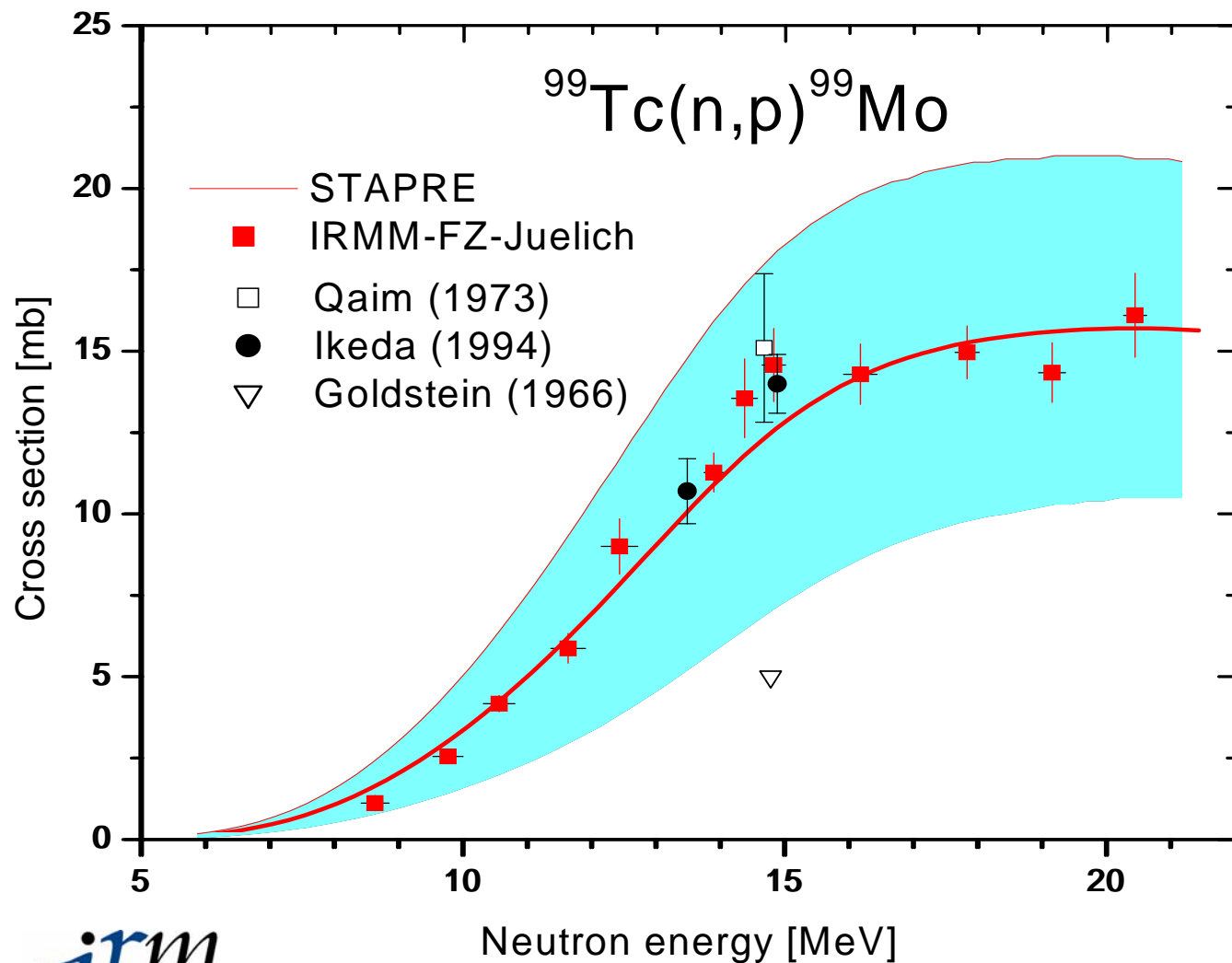
of the
preparation of the report for

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
- ...



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

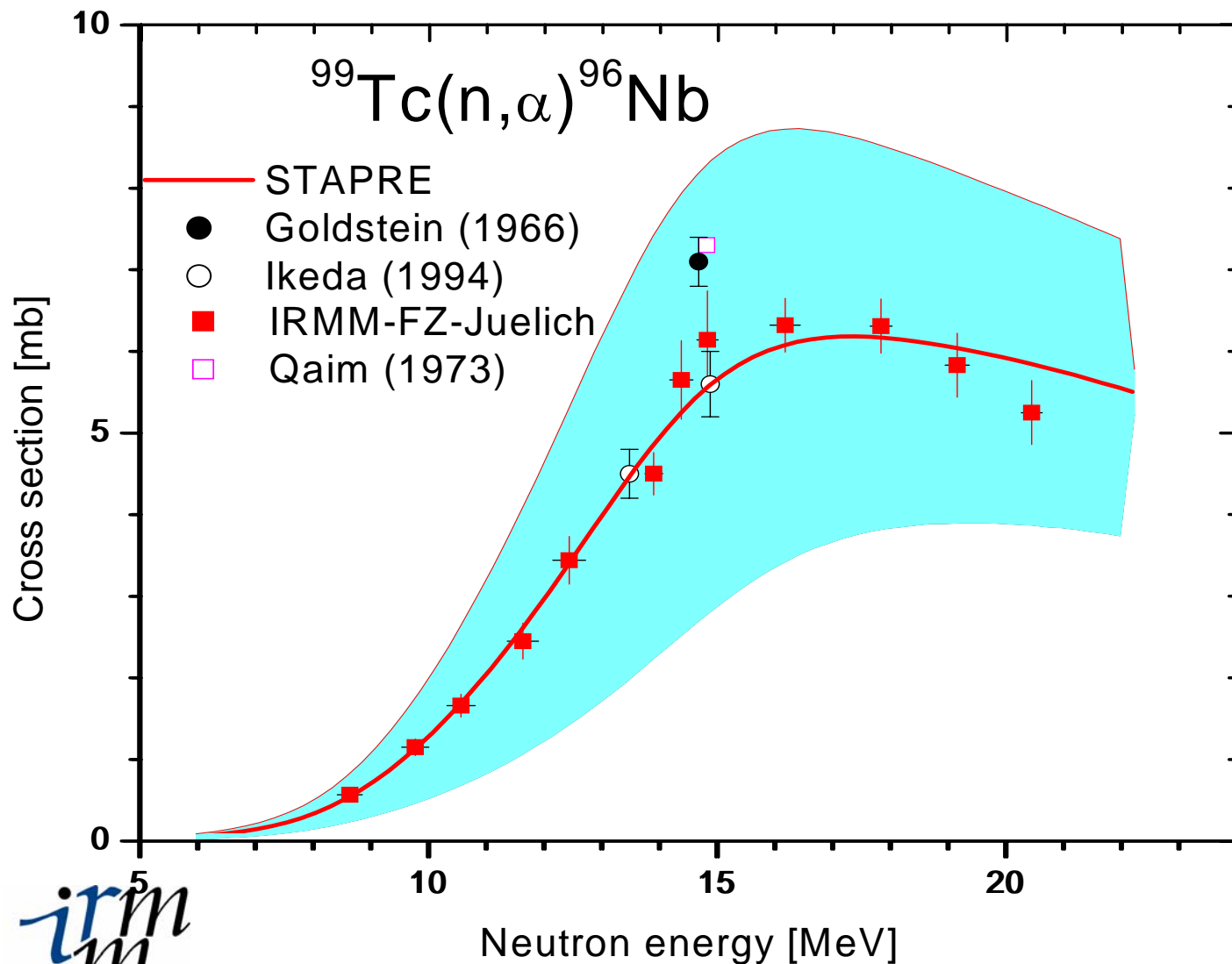
$^{99}\text{Mo} \Delta a/a = 10\%$

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

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

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

Sensitivity study (SS)



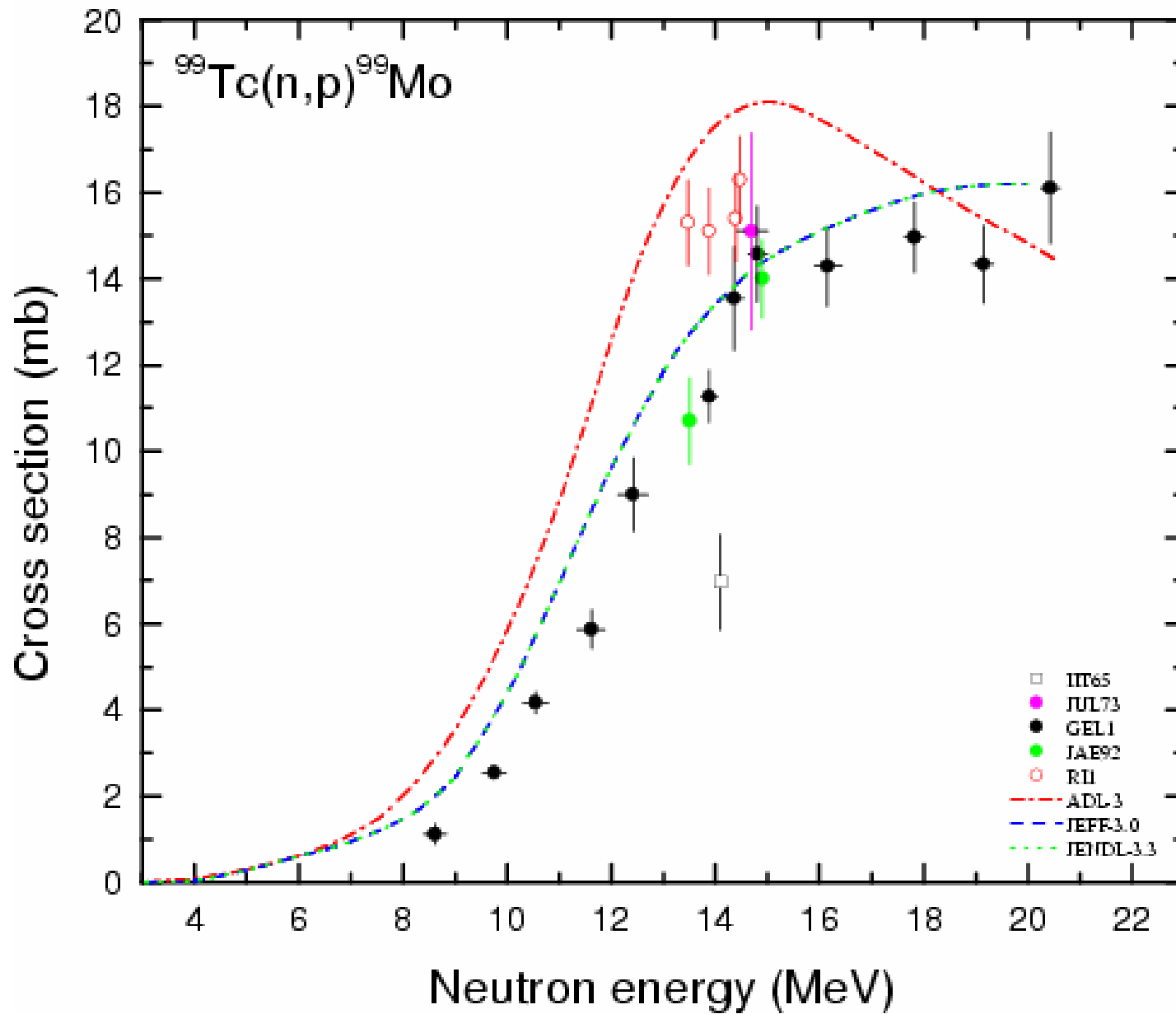
$^{99}\text{Tc} \Delta a/a=10\%$

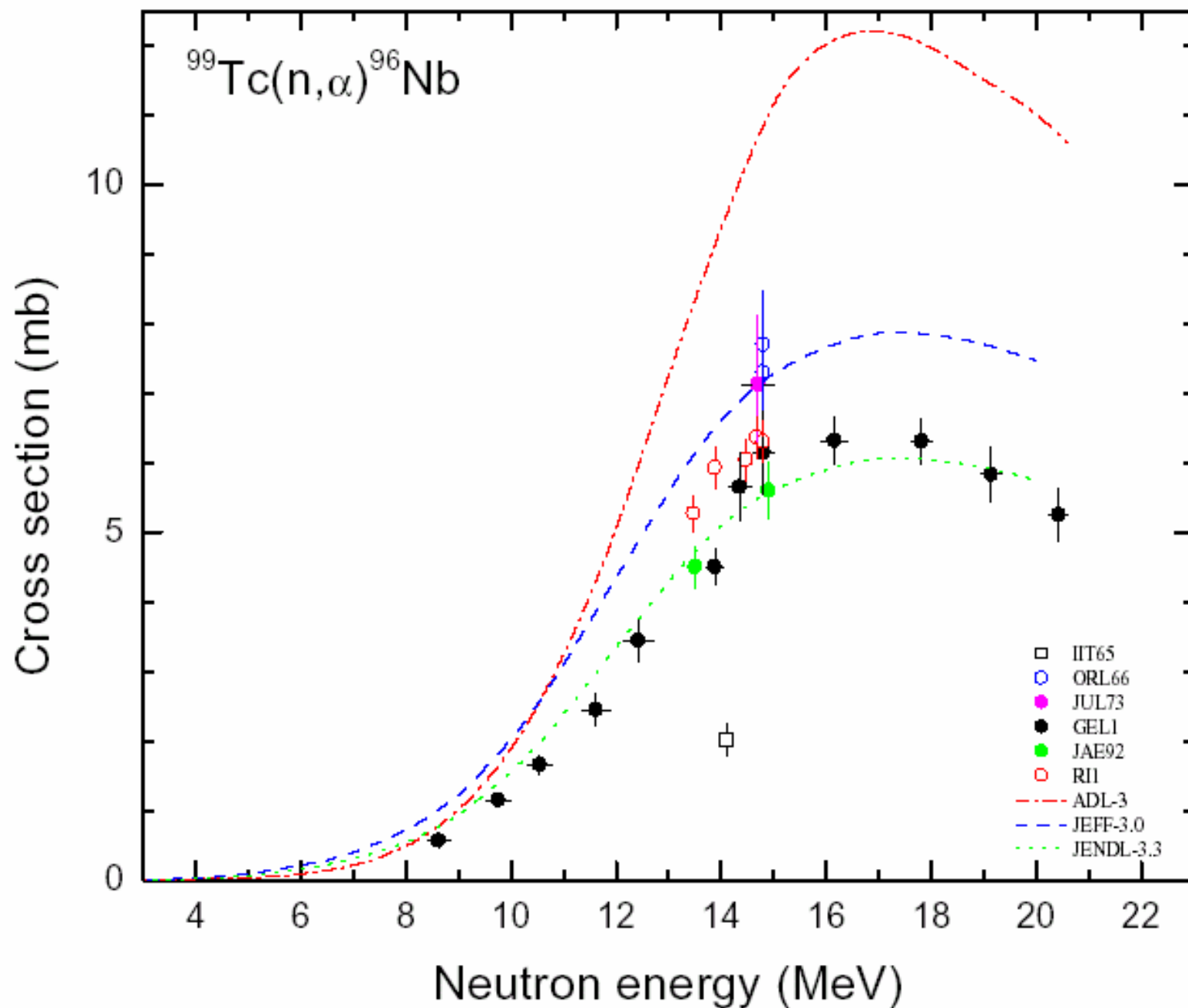
$^{96}\text{Nb} \Delta a/a=10\%$

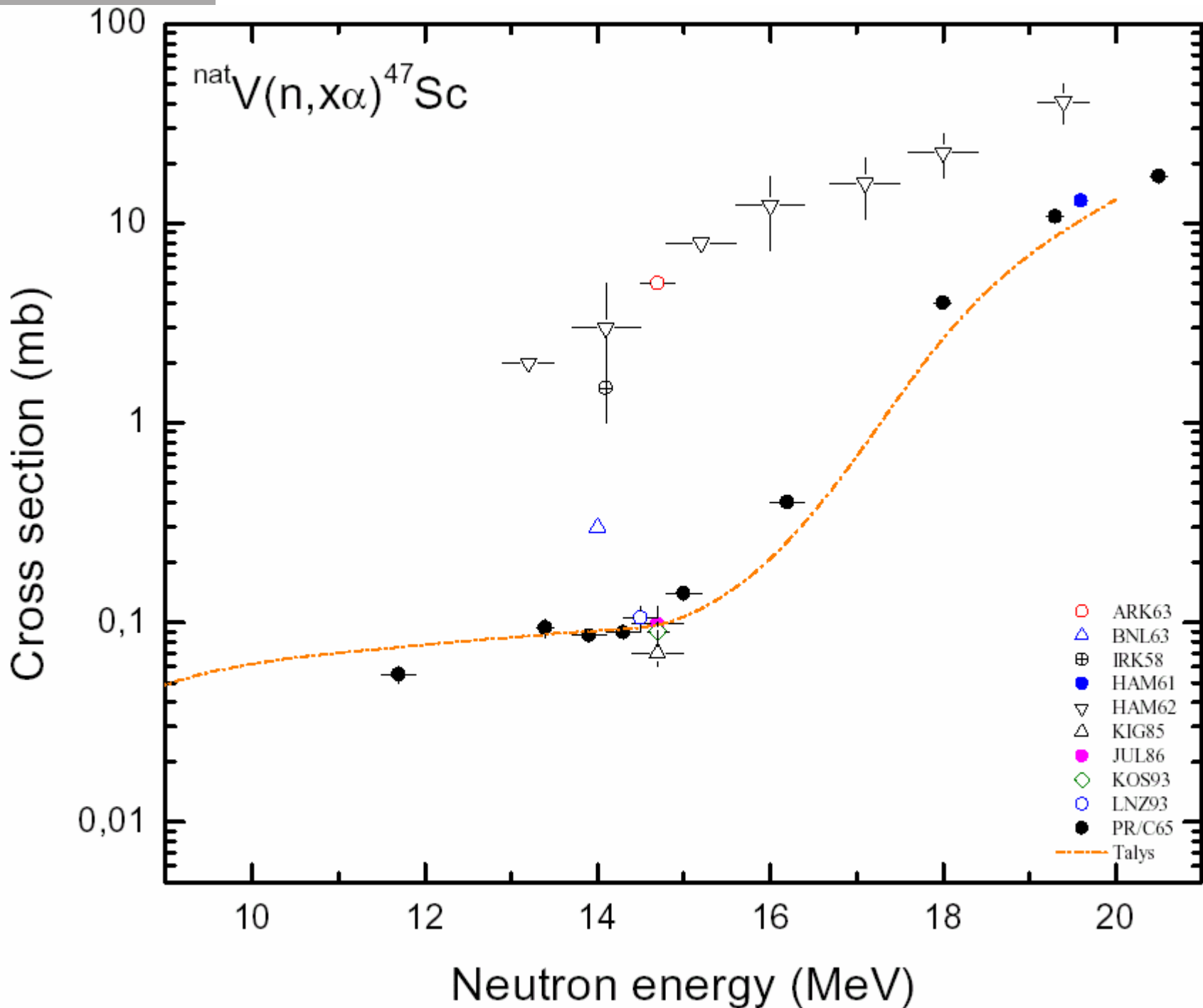
$^{99}\text{Tc} \Delta \text{abs}/\text{abs} = 5\%$

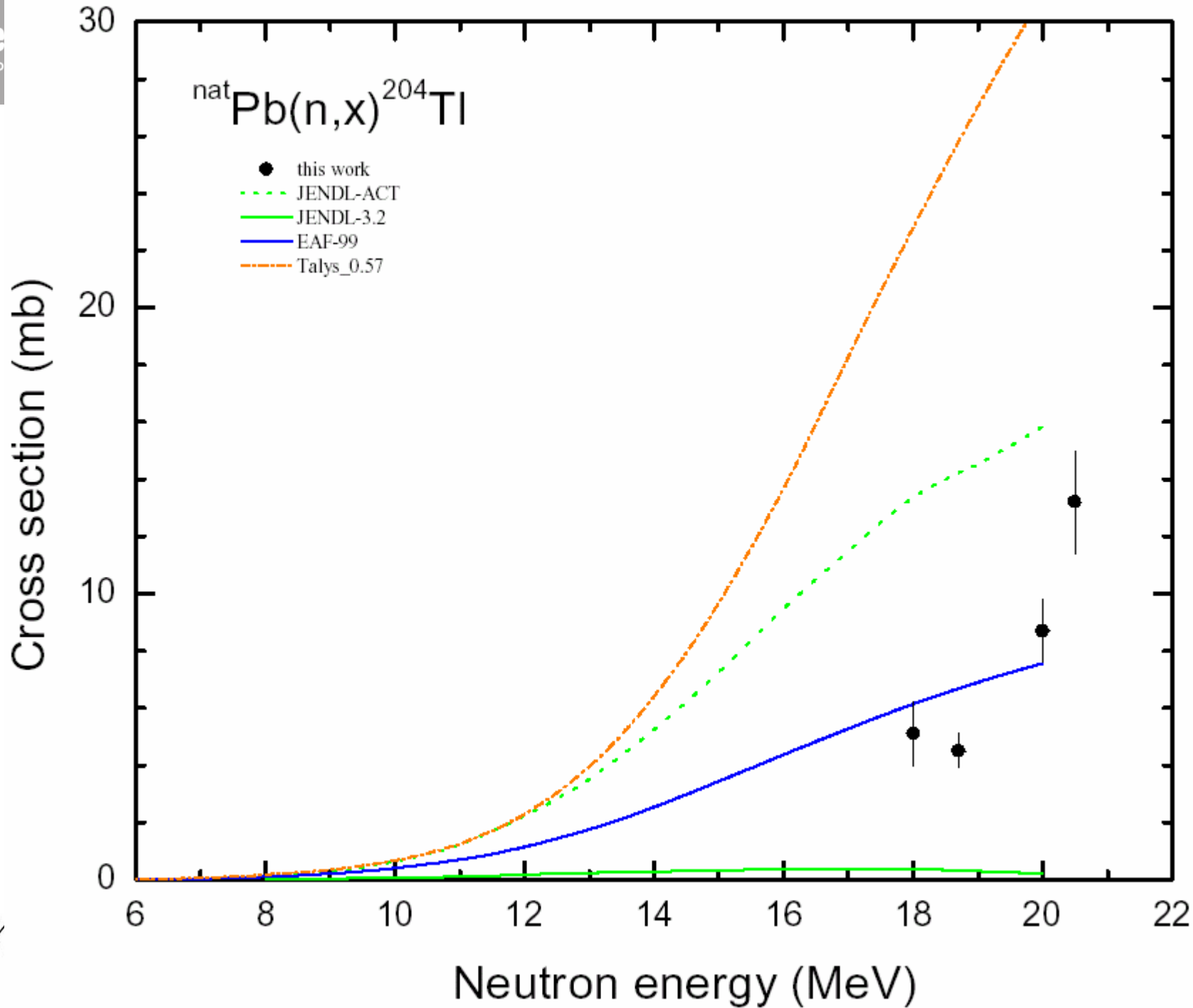
$^{99}\text{Tc} \Delta \text{FM}/\text{FM} = 10\%$

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



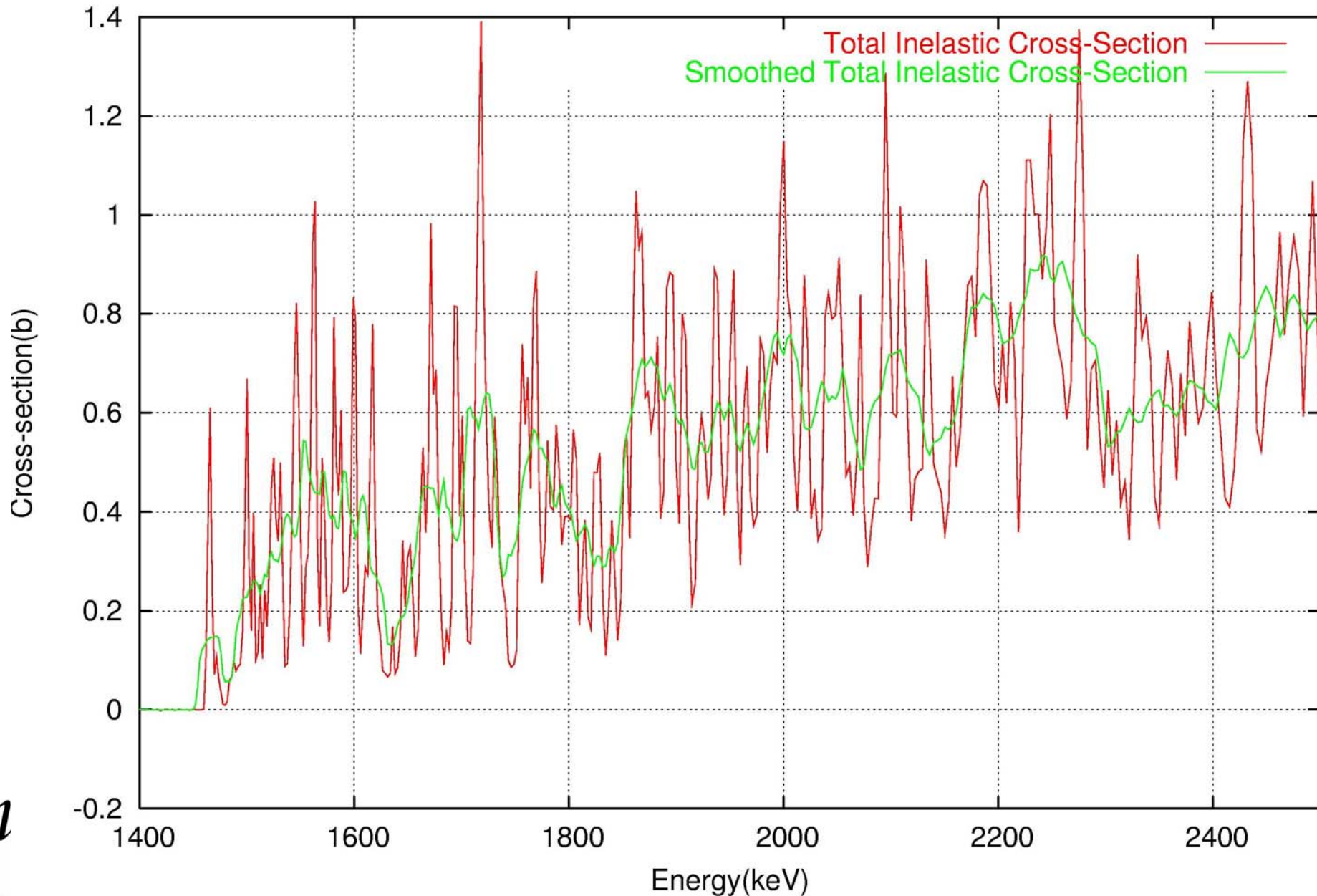






- Ni data and modeling was published: Nuclear Physics A 730 (2004) 255–284
- Mo data and modeling: paper to be revised (discussion)
- $^{14}\text{N}(n,p)^{14}\text{C}$, ^{52}Cr , $^{58}\text{Ni}(n,\alpha p)$, $^{63}\text{Cu}(n,t)$
- Nemea workshop
 - Neutron measurements, evaluations and applications
 - Budapest 5-8 Nov 2003:
 - Proceedings: www.irmm.jrc.be
- Nemea-2
 - Bucharest 20-23 Oct 2004
 - HH-IFIN, Prof. Dragulescu
 - www.irmm.jrc.be
 - abstracts 31 July 2004
- Inelastic by $(n,n'\gamma)$
 - method paper in print: NIM
 - ^{52}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}Cr at high resolution $\sigma = \sigma_{\gamma\text{-prod}}$



^{52}Cr full range, total inelastic

