# m Physics

# **Nuclear Instruments and Methods**

#### **Journals**

- R. Terlizzi *et al.* (n\_TOF collaboration), The  $^{139}$ La(n, $\gamma$ ) cross section: key for the onset of the s-process, *Phys. Rev.* C 75, 035807, 2007.
- C. Domingo-Pardo *et al.* (n\_TOF collaboration), Measurement of the neutron cross section of the s-only isotope <sup>204</sup>Pb from 1 eV to 440 keV, *Phys. Rev.* C 75, 015806, 2007.
- I. Savvidis *et al.* (n\_TOF collaboration), n\_TOF experiment: neutron beam profile and fast neutron background determination, using CR-39 passive neutron detector, *Radiation Measurements* 42, 1492-1498, 2007.
- N. Pinhão, pypk A Python extension module to handle chemical kinetics in plasma physics modelling, *The PythonPapers*, Vol. 2, (4) 35-48, 2007.

## **Conference Proceedings**

- C. Carrapiço, S. Andriamonje, E. Berthoumieux, I.F. Gonçalves, F. Gunsing, A. Mengoni, P. Vaz1, V. Vlachoudis, Design study for a new spallation target of the n\_TOF facility at CERN, *Int. Conf. Nuclear Data for Science and Techn.*, Nice, France, 22-27 Apr. 2007
- C. Domingo-Pardo *et al.* (n\_TOF collaboration), Improved lead and bismuth (n,) cross sections and their astrophysical Impact, *Int. Conf. Nuclear Data for Science and Technology*, Nice, France, 22-27 Apr. 2007
- C. Lampoudis *et al.* (n\_TOF collaboration), The <sup>234</sup>U neutron capture cross section measurement at the n TOF facility, *Int. Conf. on Nuclear Data for Science and Technology*, Nice, France, 22-27 Apr. 2007.
- K. Fujii *et al.* (n\_TOF collaboration), Capture cross section measurements of <sup>186,187,188</sup>Os at n TOF: the resolved resonance region, *Int. Conf. Nuclear Data for Science and Technology*, Nice, France, 22-27 Apr, 2007
- E. Berthoumieux *et al.* (n\_TOF collaboration), Simultaneous measurement of the neutron capture and fission yields of <sup>233</sup>U, *Int. Conf.on Nuclear Data for Science and Technology*, Nice, France, 22-27 Apr. 2007
- C. Massimi *et al.* (n\_TOF collaboration), Measurement of the  $^{197}$ Au(n, $\gamma$ ) cross section at n TOF: towards a

- new standard, *Int. Conf.on Nuclear Data for Science and Technology*, Nice, France, 22-27 Apr. 2007.
- L. Audouin *et al.* (n\_TOF collaboration), Neutron-induced fission cross sections measurements at n TOF, *Proc. of Int. Conf.on Nuclear Data for Science and Technology*, Nice, France, 22-27 Apr, 2007.
- F. Gunsing *et al.* (n\_TOF collaboration), Neutron resonance spectroscopy at n TOF at CERN, *Int. Conf.on Nuclear Data for Science and Technology*, Nice, France, 22-27 Apr. 2007.
- Marco Calviani *et al.* (n\_TOF collaboration), Measurement of neutron induced fission of <sup>235</sup>U, <sup>233</sup>U and <sup>245</sup>Cm with the FIC detector at the CERN n TOF facility, *Int. Conf. on Nuclear Data for Science and Technology*, Nice, France, 22-27 Apr. 2007.
- G. Tagliente *et al.* (n\_TOF collaboration), Measurement of the <sup>90,91,92,93,94,96</sup>Zr(n,) and <sup>139</sup>La(n,) cross sections at n TOF, *Int. Conf.on Nuclear Data for Science and Technology*, Nice, France, 22-27 Apr. 2007.
- C. Guerrero *et al.* (n\_TOF collaboration), The neutron capture cross sections of <sup>237</sup>Np(n,) and <sup>240</sup>Pu(n,) and its relevance in the transmutation of nuclear waste, *Int. Conf.on Nuclear Data for Science and Technology*, Nice, France, 22-27 Apr. 2007.
- N. Pinhão, PLASMAKIN A Python package to handle chemical kinetics in plasma physics modelling, *EuroPython* 2007, Vilnius, Lithuania, 9-11 July 2007.

#### **Communications**

I.F. Gonçalves, Response of a Bonner sphere spectrometer with a Li scintilator, *Int. Workshop on Uncertainty Assessment in Computational Dosimetry*, Bologna, Italy, 8-10 Oct 2007. Oral.

### **Internal Reports**

- J.B. Manteigas, J. Neves, C. Cruz, Technical Assistance in the Field of Engineering Applications of Radiation and Radioisotopes, ITN/2007.
- J. Neves, J. Louro, J. Manteigas, Gamma Isotope TLC Analyser, "RADIOSCAN", ITN/2007.
- J. Neves, C. Cruz, J. Manteigas, 6 Channel Micro-Current Source, ITN/2007

126 ITN Annual Report – 2007