

PR2 Report on TransNational Activities at ALTO TNA07 – WP20

Description of the publicity concerning the new opportunities for access

A dedicated Users Guide on the ALTO Web-site exists to publicise the opportunities for access: http://ipnweb.in2p3.fr/tandem-alto/index_E.html

This Web-site details the facilities available, the laboratory infrastructure and services, the selection process and a call for proposals.

In the main ALTO page http://ipnweb.in2p3.fr/tandem-alto/index_E.html the application for financial assistance for Transnational Access is described, i.e.:

- Financial support available
- Who can apply
- How to apply
- The Application Form

Description of the selection procedure

The selection of users by the PAC (Programme Advisory Committee) is made only on the scientific merit of the proposals submitted. The proposals are reviewed independently of their country of origin. Experiments are evaluated and awarded a number of 8-hour shifts of beam time, according to the number requested and the number deemed suitable by the PAC. Once the list of approved experiments has been determined by the PAC, two members of the PAC (the chairman and the scientific coordinator) together with the responsible of the TNA are asked to choose, from the approved experiments, those which are entitled to financial support through the TA activity.

During the reporting period, one PAC for nuclear physics was held at Orsay, on 14/15 February 2013. 25 Proposals were submitted on which 17 were eligible to financial support, but only 20 proposals were accepted on which 7 were eligible.

In Annex 1, there is the list of the Selection Panel members for the reporting period as well as the number of eligible user-projects submitted to the panel during the reporting period and the number of the selected ones.

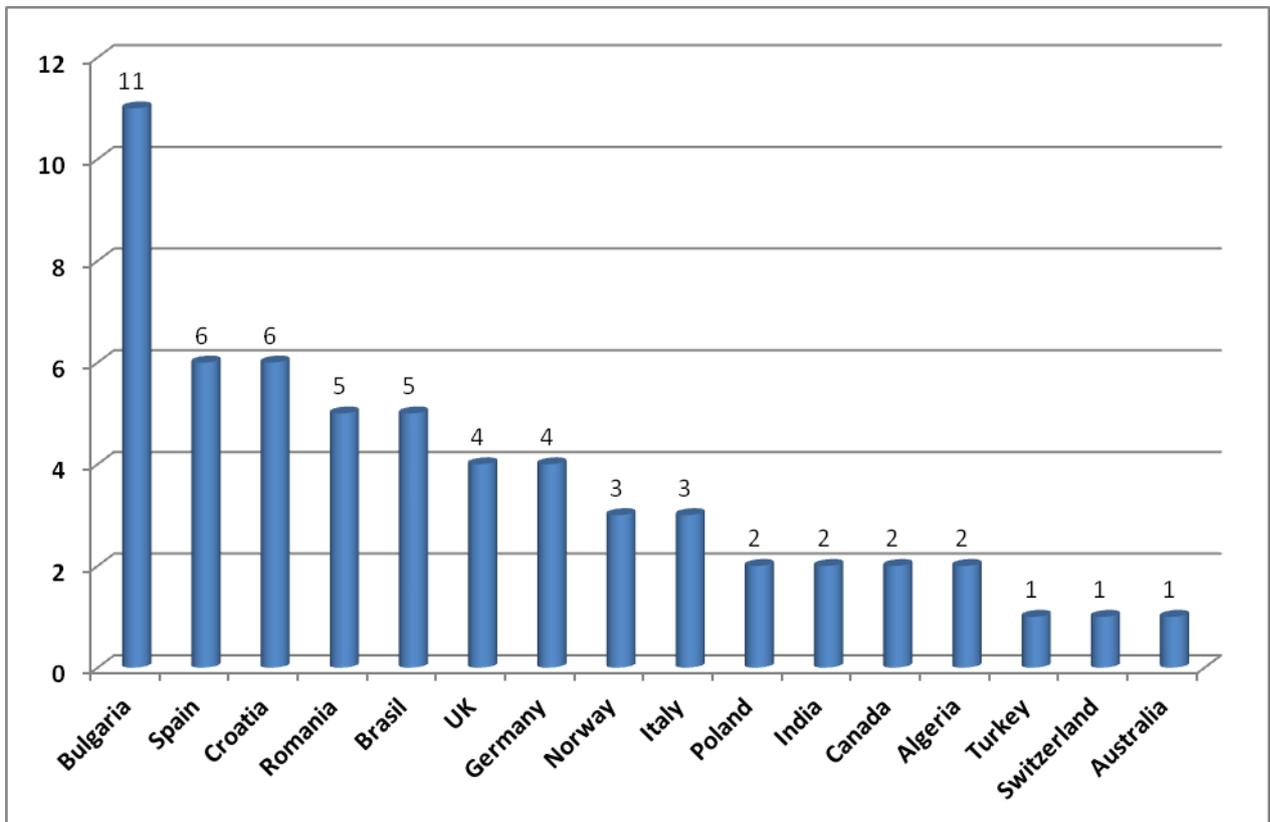
Transnational Access activity

During the reporting period

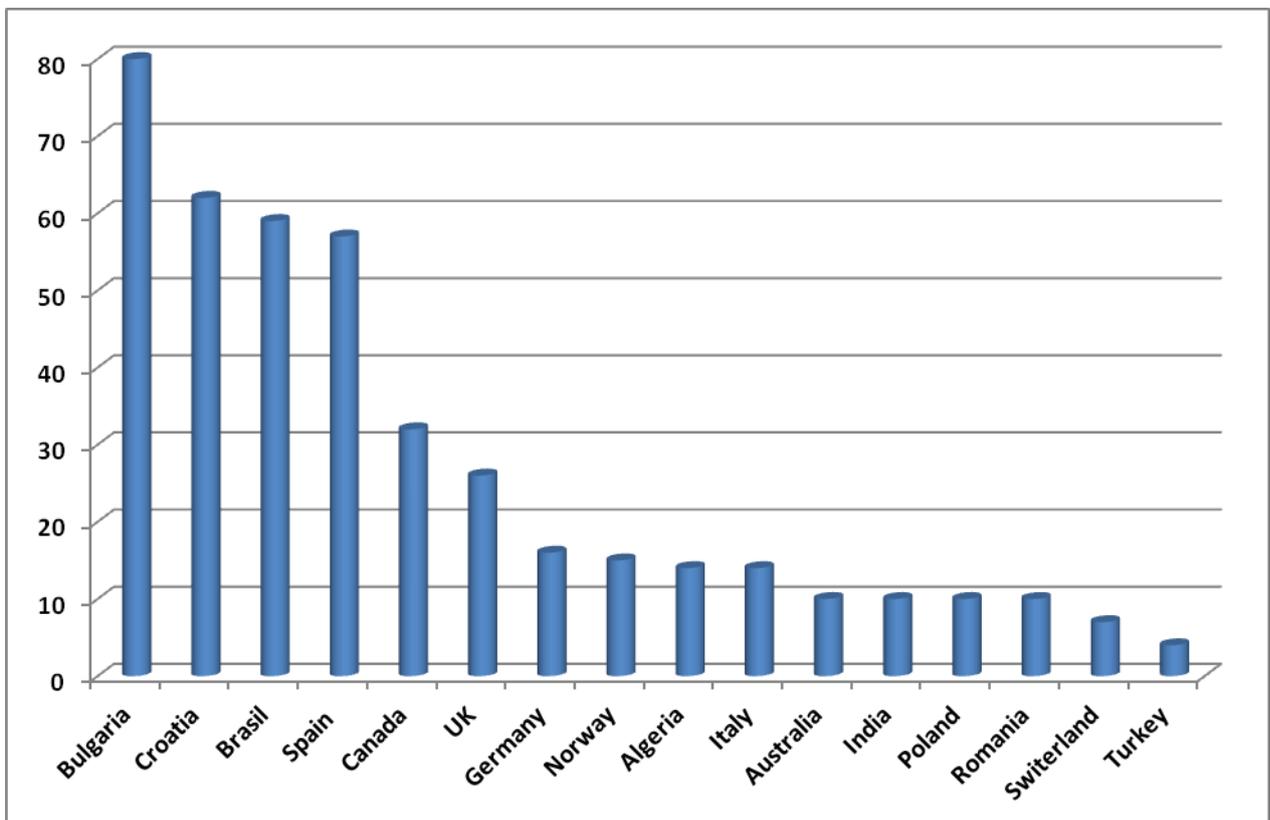
- 4824 experimental hours were delivered in total
- 1680 experimental hours were offered under the proposal
- 38 users were supported by the TNA
- They spent 423 person-days at ALTO
- 89% were new users

The scientific areas of the experiments performed at ALTO are as follows: nuclear structure and spectroscopy of exotic nuclei; fusion, fission of heavy nuclei; nuclear astrophysics; and test of fundamental interactions. Among others, the goals are to

understand the structures of the nuclei, their shape and shell evolutions from stable to drip line nuclei, to measure the properties of nuclear matter and to evaluate the possible astrophysical implications.



Individual Users by Home Institution Country



Duration of stay by Home Institution country

Scientific output of the users at the facilities

4 publications have been published from the complex experiments performed at ALTO during the reporting period (see Annex 4 of the Data Base).

User meetings

The chairman of the User Group has been designed : Georgy Georgiev (CSNSM, Orsay, France)

An International workshop of the users – “Workshop ALTO”- was organised on May 14th and 15th 2013 . <http://ipnweb.in2p3.fr/wsalto2013/>

The purpose of the Workshop will be to review and discuss the research carried out at ALTO and the related activities carried out at similar facilities around the world.

The Colloque will cover the range of topics addressed at ALTO

- Nuclear structure
- Reaction mechanism
- Nuclear astrophysics
- Interaction of ions with matter
- Interdisciplinary research

Annexes

Annex 1 – Composition of the Users Selection Panel

PAC :

Chairman of the PAC :

Richard F. CASTEN – WNSL, Yale University – New Haven - USA – richard.casten@yale.edu

Tandem-ALTO Scientific coordinator :

David VERNEY – IPN Orsay – verney@ipno.in2p3.fr

Facility chief engineer :

Abdelhakim SAÏD - IPN Orsay : said@ipno.in2p3.fr

Member :

Emmanuel BALANZAT (CIMAP – Caen) : balanzat@ganil.fr

Member :

D. BALABANSKI (Sofia – Bulgarie) : balabanski@inrne.bas.bg

Member :

Stéphane GREVY (CENBG) : grevy@cenbg.in2p3.fr

Member :

Elias KHAN (IPNO) : khan@ipno.in2p3.fr

Member :

W. KORTEN (SPOHN-IRFU-CEA) : wolfram.korten@cea.fr

Member :

Berta RUBIO (Sevilla-Spain) : Berta.Rubio@ific.uv.es

Member :

Jean-Charles THOMAS (Ganil, Caen) : thomasjc@ganil.fr

Member :

Aurora TUMINO (LNS-INFN-Catania-Italia) : tumino@lns.infn.it

Member :

C. TRAUTMANN (GSI- Allemagne) : C.Trautmann@gsi.de

Annex 2 – List of User-Projects

IM-CL-20 :

Fabrication of quantum dots by C60 irradiation of sandwiched ta-C layers

Spokesperson : Ch. Trautmann (GSI, Darmstadt, Germany)

I-SI-21 :

Pulse shape analysis studies for Gaspard-Hyde-Trace

Spokesperson : Duenas (Huelva, Spain)

N-SI-56

Study of key resonances in ^{19}Ne relevant to the $^{18}\text{F}(p,a)^{15}\text{O}$ reaction in novae

Spokesperson : Laird (York, UK)

N-SI-57

Measurement of alpha particle fusion with Pb isotopes nuclei

Spokesperson : Wolski, (Krakow, Poland)

N-SI-60

Measurement of prompt fission gamma ray mean energy and multiplicity from the reaction $^{238}\text{U}(n,f)$ as a function of incident neutron energy

Spokesperson Oberstedt (Geel, Belgium)

N-SI-62

Nuclear moment and nuclear orientation from complete fusion and transfer reactions

Spokesperson Marginean (Bucharest, Romania)

I-SI-63

Time dependent recoil in vacuum for Na like ^{56}Fe ions

Spokesperson : Yordanov (Heidelberg, Germany)

Annex 3 – List of Users

N-SI-35	FERANDEZ MARTINEZ	Begona	Spain	27/06/12	07/07/12
N-SI-35	CREMA	Edilson	Brésil	24/06/12	14/07/12
N-SI-35	FARIA	Pedro Neto	Brésil	26/06/12	09/07/12
N-SI-35	ROMERO GASQUES	Leandro	Brésil	28/06/12	07/07/12
N-SI-35	HUIZA	Juan Felix Pari	Brésil	27/06/12	12/07/12
N-SI-35	GONZALEZ ALVAREZ	Marco Aurelio	Spain	28/06/12	09/07/12
N-SI-35	MEDINA	Nilberto Heder	Brésil	29/06/12	07/07/12

N-SI-35	ABOU HAIDAR	Ziad	Spain	27/06/12	07/07/12
N-SI-51	FISICHELLA	Maria	Italy	15/10/12	21/10/12
N-SI-51	TOKIC	Vedrana	Croatia	14/10/12	30/10/12
N-SI-51	TOKIC	Vedrana	Croatia	07/11/12	12/11/12
N-SI-51	MIJATOVIC	Tea	Croatia	18/10/12	30/10/12
N-SI-51	SKUKAN	Nakto	Croatia	14/10/12	30/10/12
N-SI-51	SKUKAN	Nakto	Croatia	06/11/12	12/11/12
N-SI-48	DETISTOV	Pavel	Bulgaria	30/10/12	07/11/12
N-SI-48	YORDANOV	Deyan	Switzerland	23/10/12	31/10/12
N-SI-48	DANCHEV	Miroslav	Bulgaria	28/10/12	03/11/12
N-SI-48	BALABANSKI	Dimiter	Bulgaria	05/11/12	21/11/12
N-SI-48	GLADNISHKI	Kalin	Bulgaria	25/10/12	02/11/12
N-SI-48	STUCHBERY	Andrew	Australia	23/10/12	03/11/12
N-SI-48	ATANASOVA	Liliya		29/10/12	07/11/12
N-SI-50	GIACOPPO	Francesca	Norway	11/11/12	16/11/12
N-SI-50	BELLO	Franck	Norway	11/11/12	16/11/12
N-SI-50	KLINTEFJORD	Malin	Norway	11/11/12	16/11/12
N-SI-44	DETISTOV	Pavel	Bulgaria	19/11/12	25/11/12
N-SI-44	GLADNISHKI	Kalin	Bulgaria	16/11/12	25/11/12
N-SI-44	ATANASOVA	Liliya		17/11/12	24/11/12
N-SI-44	DANCHEV	Miroslav	Bulgaria	18/11/12	25/11/12
N-SI-44	BALABANSKI	Dimiter	Bulgaria	17/11/12	21/11/12
N-SI-44	DUCKWITZ	Hannah	Germany	18/11/12	20/11/12
N-SI-44	BLAZHEV	Andrey	Germany	19/11/12	21/11/12
N-SI-44	RAINOVSKI	Geoigi	Bulgaria	18/11/12	25/11/12
N-SI-44	RADECK	Desiree	Germany	18/11/12	23/11/12
N-SI-46 N-SI-43	IRVINE	Daniel	Canada	04/02/13	25/02/13
N-SI-46 N-SI-43	PARIKH	Anuj	Spain	12/02/13	20/02/13
N-SI-46 N-SI-43	TOMLINSON	Jessica	England	20/02/13	24/02/13
N-SI-46 N-SI-43	MANWELL	Spencer	Canada	09/02/13	21/02/13
N-SI-46 N-SI-43	LONGLAND	Richard	Spain	11/02/13	25/02/13
N-SI-46 N-SI-43	ADSLEY	Philip	England	15/02/13	25/02/13
I-SI-19	BORCEA	Ruxandra	Romania	03/03/13	15/03/13
I-SI-19	STANOIU	Mihai	Romania	03/03/13	15/03/13
I-SI-19	ROTARU	Florin	Romania	04/03/13	15/03/13
I-SI-19	PETRONE	Cristina	Romania	04/03/13	15/03/13
I-SI-19	MENGONI	Daniele	Italy	11/03/13	15/03/13
I-SI-19	GRASSI	Laura	Croatie	10/03/13	24/03/13
IM-CL-19	AMANI	Julian	Germany	17/03/13	23/03/13
N-SI-36	BENAMARA	Salem	Algérie	03/04/13	02/05/13
N-SI-36	OUBLEBSIR	Nadia	Algérie	15/04/13	28/04/13
N-SI-36	MARQUINEZ	Gloria	Spain	16/04/13	22/04/13
N-SI-36	ADSLEY	Philip	England	11/04/13	22/04/13
I-SI-19	YAVUZKANAT	Nuray	United	26/05/13	31/05/13

			Kingdom		
I-SI-19	GOURISHETTY	Anil	India	26/05/13	01/06/13
I-SI-19	STANOIU	Mihai	Romania	26/05/13	31/05/13
I-SI-19	KRZYSEIK	Mateusz	Poland	26/05/13	01/06/13
I-SI-19	HADYNSKA-KLEK	Katarzyna	Poland	22/05/13	01/06/13
I-SI-19	ERTURK	Sefa	Turkey	27/05/13	31/05/13
I-SI-19	RIBOLDI	Stefano	Italy	23/05/13	27/05/13
I-SI-19	NANAL	Vandana	India	26/05/13	08/06/13

Annex 4 – List of Publications (from work carried out under the Transnational Access activity).

Identification of light particles by means of pulse shape analysis with silicon detector at low energy

Jose Antonio Duenas, Daniele Mengoni, Vivek V Parkar, Rafael Berjillos, Marlene Assie, Didier Beaumel, Angel Sanchez, Martel Ismael, Nuclear Instrument Methods **A676**(2012)70

Quasi-elastic processes of the $^{48}\text{Ca} + ^{120}\text{Sn}$ system and the ^{48}Ca nuclear matter density,

E. Crema, M. A. G. Alvarez, N. H. Medina, et al. accepted in Phys ReV C

Dependency on the silicon detector working bias for proton-deuteron particle identification at low energies

Jose Antonio Duenas et al., NIMA714 48 (2013)

The Orsay universal plunger system,

J. Ljungvall et al., Nucl. Instrum. And Meth. **A679** (2012) 61.