

**20 years of JINR-IN2P3 cooperation
in the field of
accelerator neutrino physics**

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(DLNP, JINR)

**Active collaboration on
the NOMAD, HARP, NA61/SHINE and
T2K experiments
(more than 60 common publications)**

Collaboration started in 1993 at the time of preparation of the **NOMAD** experiment at **CERN**

Initiated by the JINR director Vladimir Kadyshevsky and supported by Prof. Francois Vannucci (LPNHE)

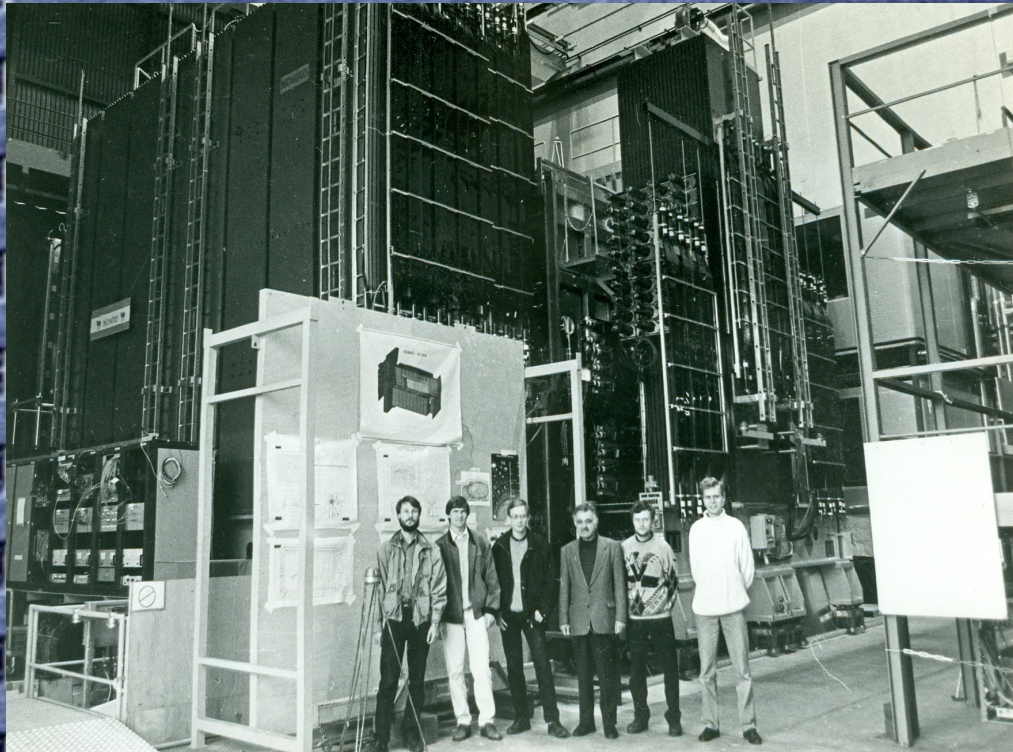
Very successful collaboration with LPNHE (Paris) and LAPP (Annecy) on detector operation, off-line software development and data analysis

A large number of important results obtained

3 PhD theses defended by Russian physicists in France (first example of recognized French PhD diploma after translation into Russian)

7 PhD theses in total defended by young JINR physicists using the NOMAD data

Collaboration at work



Collaboration at work



Collaboration continued in 1999 at the time of preparation of the HARP experiment at CERN

Initiated by Dr. Jacques Dumarchez (LPNHE)

Strong collaboration with LPNHE (Paris) group on detector operation, on-line and off-line software development and data analysis

A large number of important results obtained, in particular for prediction of neutrino fluxes in accelerator neutrino experiments (K2K, MiniBooNE) and for design studies of future neutrino facilities - Neutrino Factories and SuperBeams

Collaboration at work



Collaboration continued in 2006 at the time of preparation of the T2K experiment in Japan

Initiated by Dr. Jacques Dumarchez (LPNHE) and Dr. Boris Popov

Strong collaboration with LPNHE (Paris) group on detector operation, on-line and off-line software development and data analysis

The NA61/SHINE experiment at CERN is extremely important for precise predictions of neutrino fluxes in T2K

A large number of important results obtained, including the first observation of a non-zero value of the θ_{13} mixing angle in 2011

T2K experiment continues to take data and to produce new physics results

Collaboration at work



Active members of this successful collaboration over years

from DLNP, JINR: S.A.Bunyatov, A.V.Krasnoperov, V.V.Lyubushkin, Yu.A.Nefedov,
B.A.Popov, V.V.Tereshchenko, V.Yu.Valuev

from LPNHE (Paris): P.Astier, J.Dumarchez, E.Gangler, C.Lachaud, A.Letessier-Selvon,
J.-M.Levy, K.Schahmaneche, F.Vannucci

From LAPP (Annecy): P.Nedelec, H.Pessard, D.Sillou

**Hope to keep this collaboration going
for future accelerator neutrino
experiments!**