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# Shape transition from superdeformed to spherical states in neutron deficient 90 nuclei

## Fact Sheet

### Project Information

Grant agreement ID: FMBI961020

Project closed

**Start date**

1 January 1997

**End date**

31 December 1998

**Funded under**

Specific research and technological development programme in the field of the training and mobility of researchers, 1994-1998

**Total cost**

No data

**EU contribution**

No data

**Coordinated by**

ISTITUTO NAZIONALE DI FISICA  
NUCLEARE

 Italy

## Objective

The research project to be carried out at LNL, INFN is based on an experiment using the  $^{40}\text{Ca}(190\text{-}200\text{ MeV}) + ^{58}\text{Ni} \rightarrow ^{98}\text{Cd}$  (Compound Nucleus) reaction and the GASP array (first phase) and EUROBALL III (second phase) equipped with selective

devices for neutron and light charged particle identification. This project follows naturally the work that led to the doctoral thesis of the applicant. The results expected are the extension of the shell model structures and identification of the theoretically predicted superdeformation at higher spins as well as the transition of structure from deformed and super deformed shapes to spherical states in neutron deficient nuclei in the mass 90 region. The project will offer the possibility to study super deformation at N Z in the regime of strong proton-neutron correlations above a simple shell model structure and will add a new dimension to the understanding of nuclear structure and shape transitions.

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## Programme(s)

[FP4-TMR - Specific research and technological development programme in the field of the training and mobility of researchers, 1994-1998](#)

## Topic(s)

[0302 - Post-doctoral research training.grants](#)

[TP02 - Nuclear Physics](#)

## Call for proposal

Data not available

## Funding Scheme

[RGI - Research grants \(individual fellowships\)](#).

## Coordinator



**ISTITUTO NAZIONALE DI FISICA NUCLEARE**

EU contribution

**No data**

Total cost

**No data**

Address

Via Romea 4  
35020 LEGNARO  
 Italy 

## Participants (1)

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**Not available**

 Sweden

EU contribution

**No data**

Address



Total cost

**No data**

**Last update:** 11 March 1997

**Permalink:** <https://cordis.europa.eu/project/id/FMBI961020>

European Union, 2025

