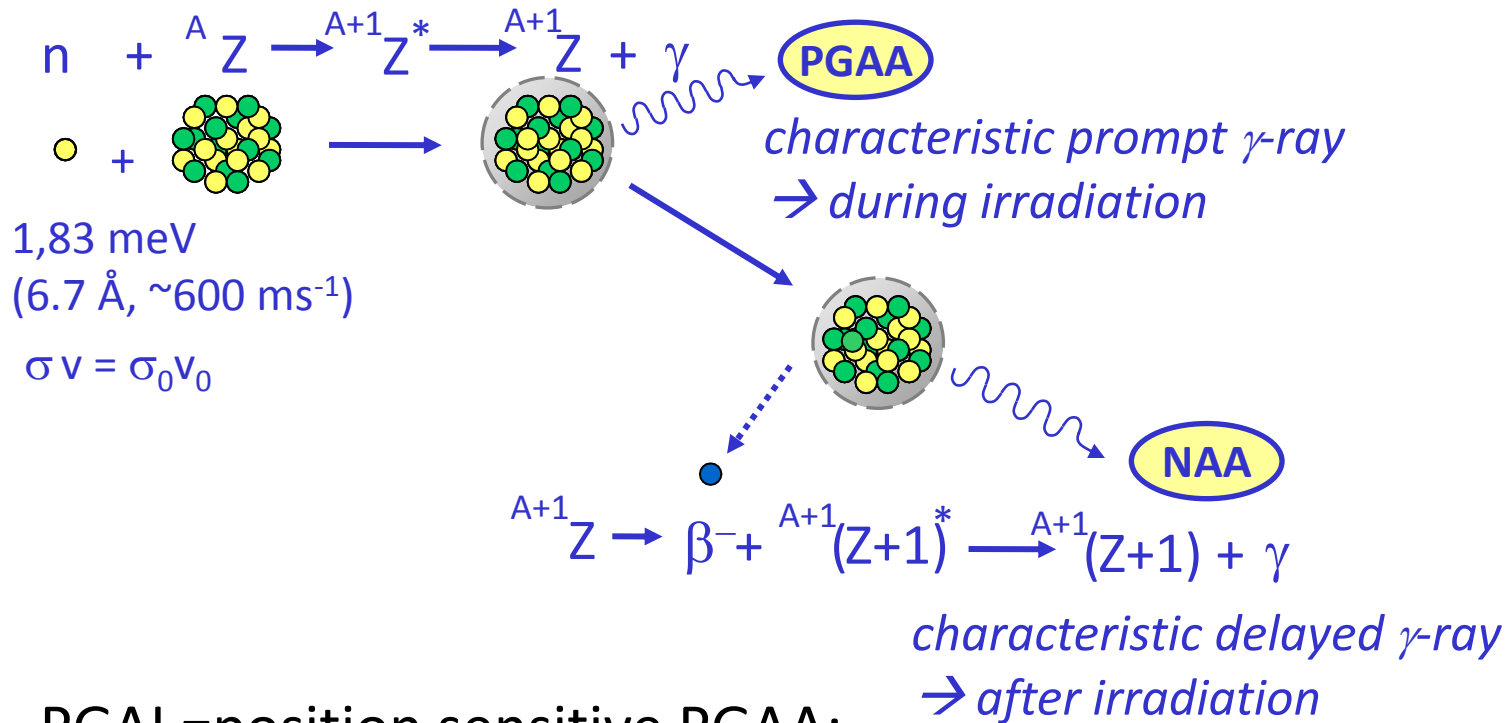


**From the ANCIENT CHARM Project  
to the future combined PGAI-NT station at FRM II**

P. Kudejova, R. Schulze, L. Canella, S. Söllradl, Zs. Révay, J.  
Jolie, A. Türler, Z. Kis, L. Szentmiklósi,  
T. Belgya and the Ancient Charm Collaboration

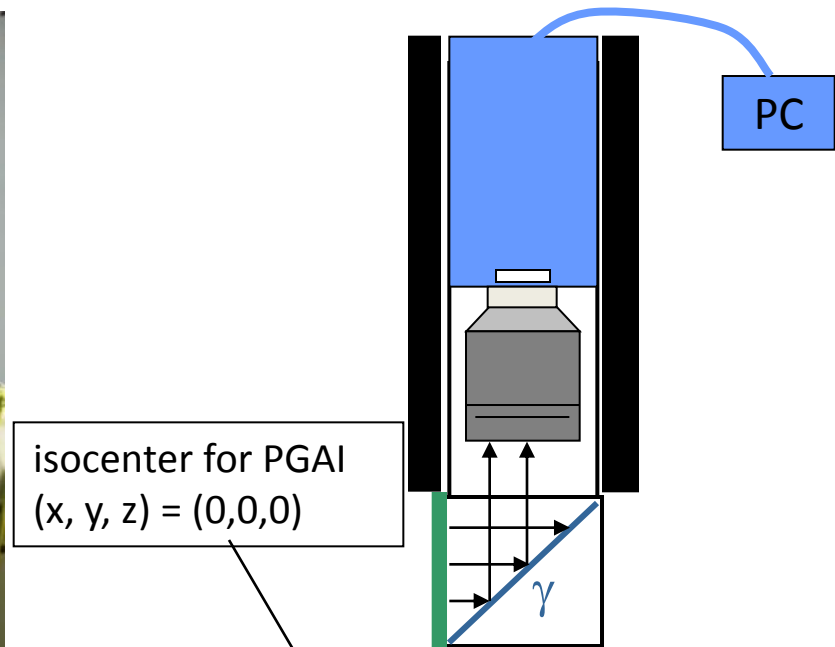
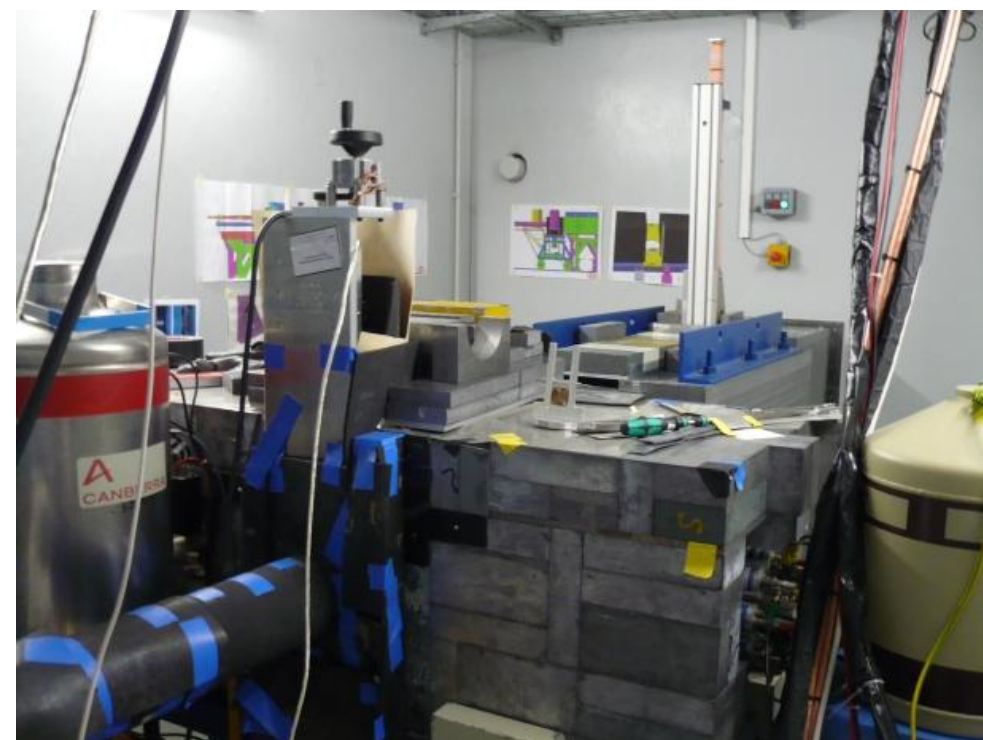
# From PGAA to PGAI

## PGAA: elemental composition

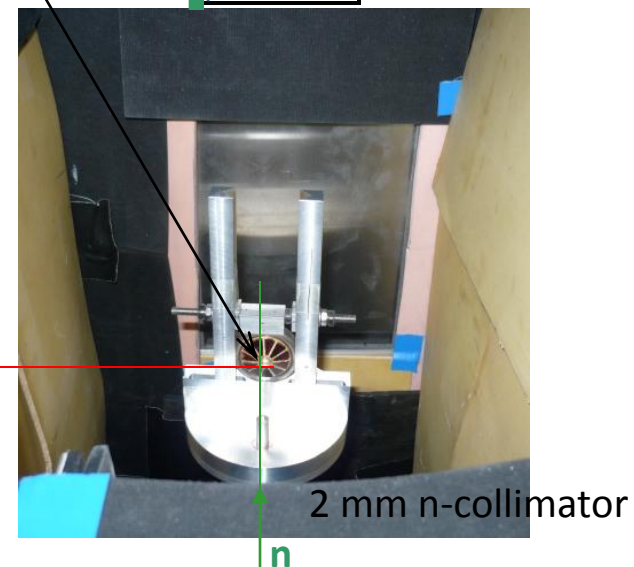
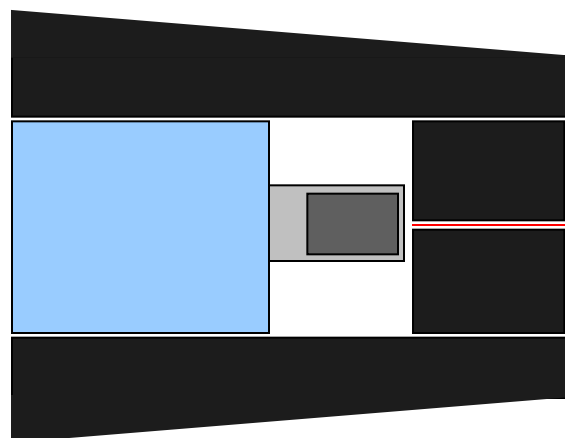


PGAI = position sensitive PGAA:  
collimated n-beam  
collimated gamma-rays

# What does NI have to do with it?

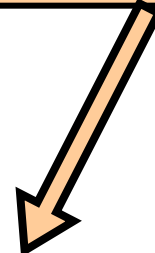
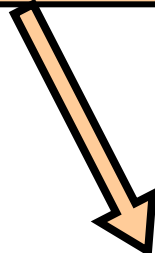


3 mm Pb-collimator

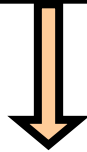


PGAI :  
elements + concentration  
in 3D image

N-tomography:  
form + structure  
in 3D image



Data  
comparison and registration

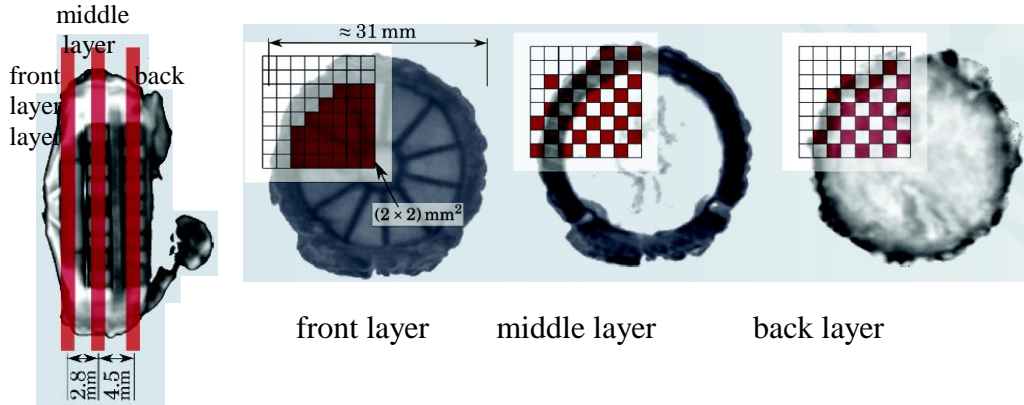


complementary information

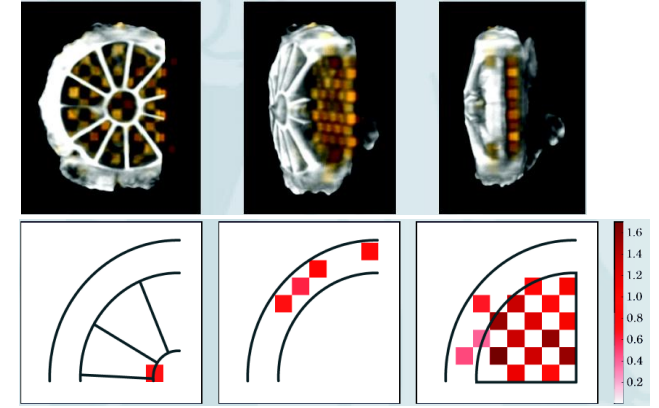
for  
archaeology, geochemistry,  
cosmochemistry, industry, ...

# PGAI results:

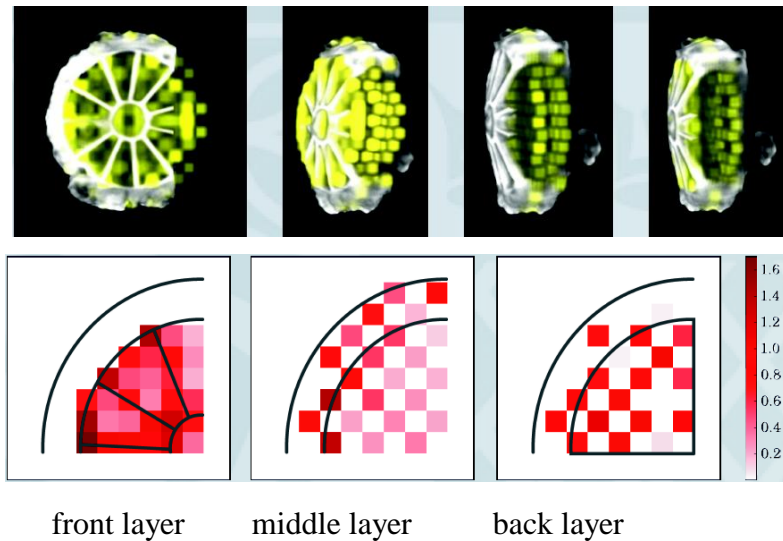
**Measurement positions** for the 3D-PGAI measurement on the fibula



**Copper distribution** showing a copper supported back-plate



**Gold distribution** mainly on the surface of the fibula (gilding)



**Silver distribution** following the linings of the front inlays

