


# COSY

## at Forschungszentrum Jülich

The ~~CP~~EDM Test and Development Facility

Hans Ströher | Forschungszentrum Jülich

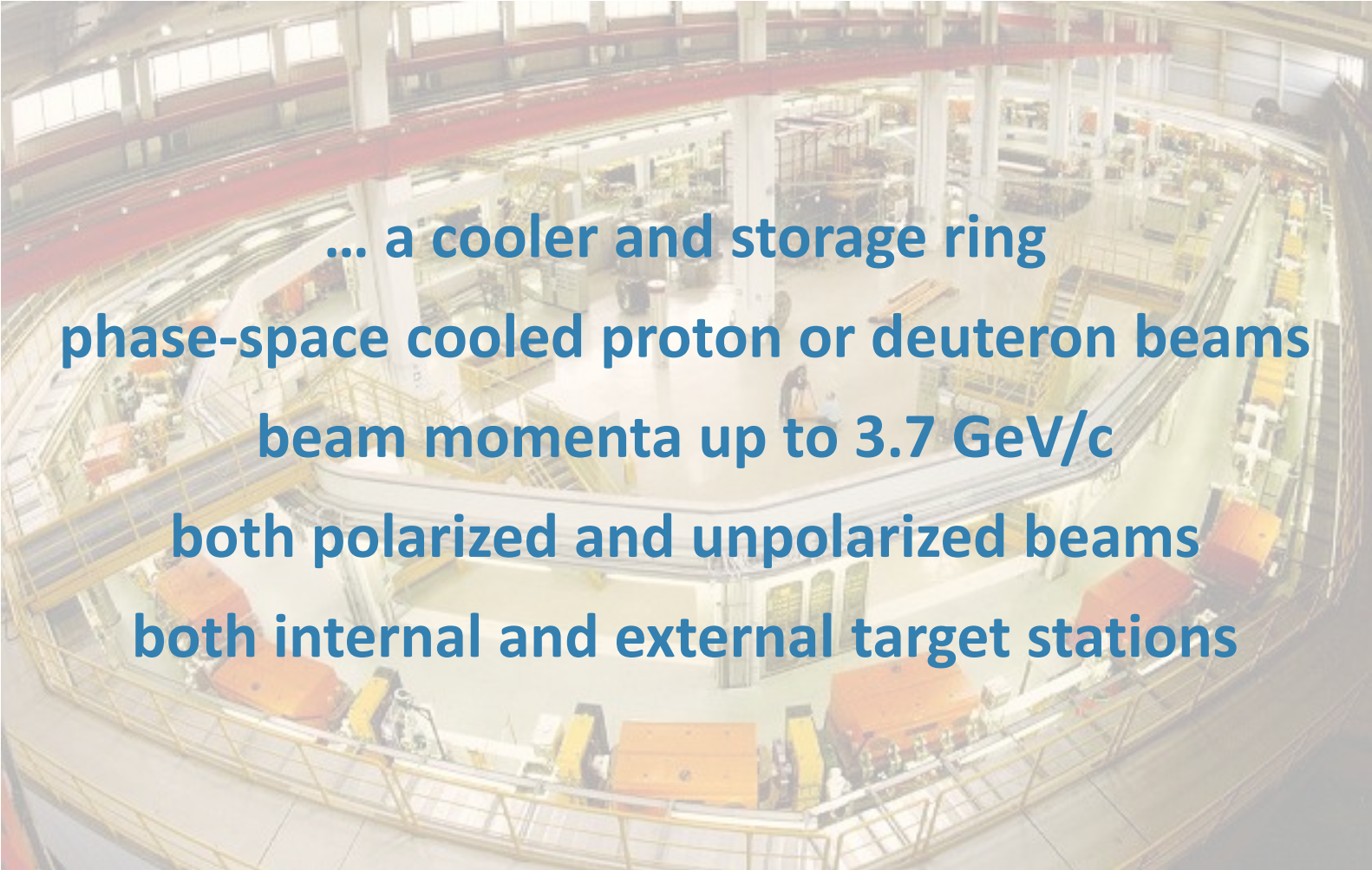
# COSY

... the only (operational) test facility for  EDM



# COSY

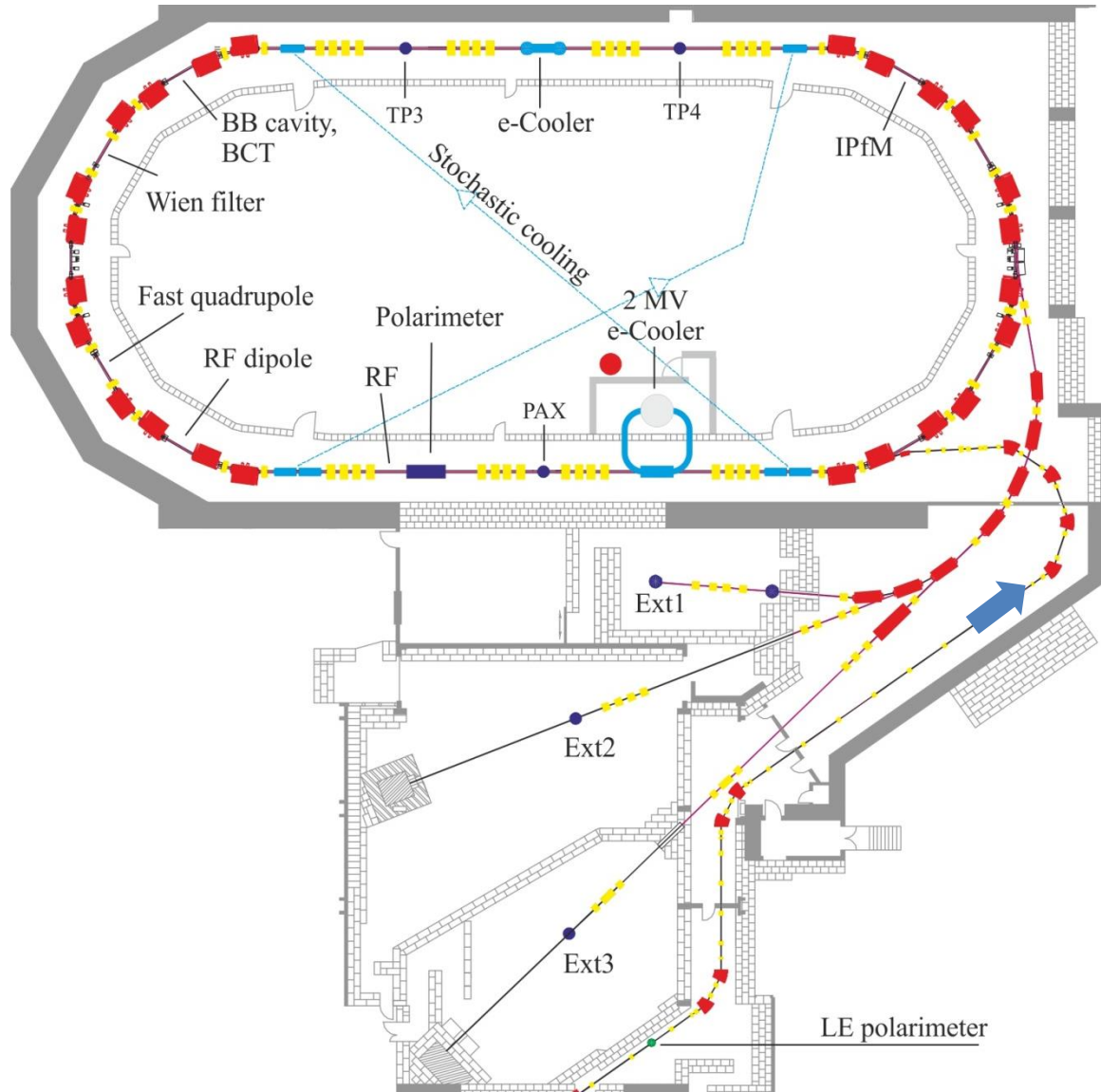
... the only (operational) test facility for  $\overline{\text{CR}}$  EDM



... a cooler and storage ring  
phase-space cooled proton or deuteron beams  
beam momenta up to 3.7 GeV/c  
both polarized and unpolarized beams  
both internal and external target stations

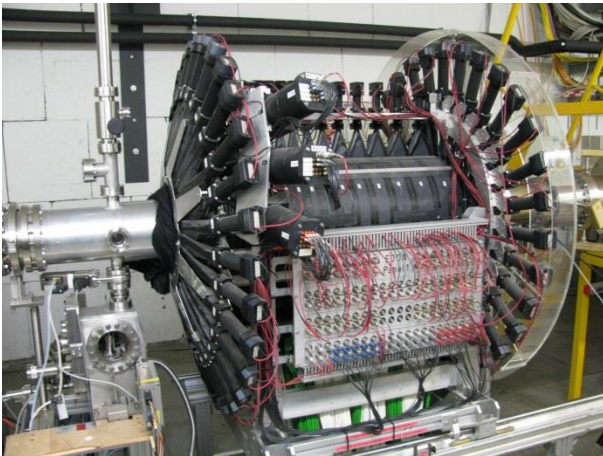
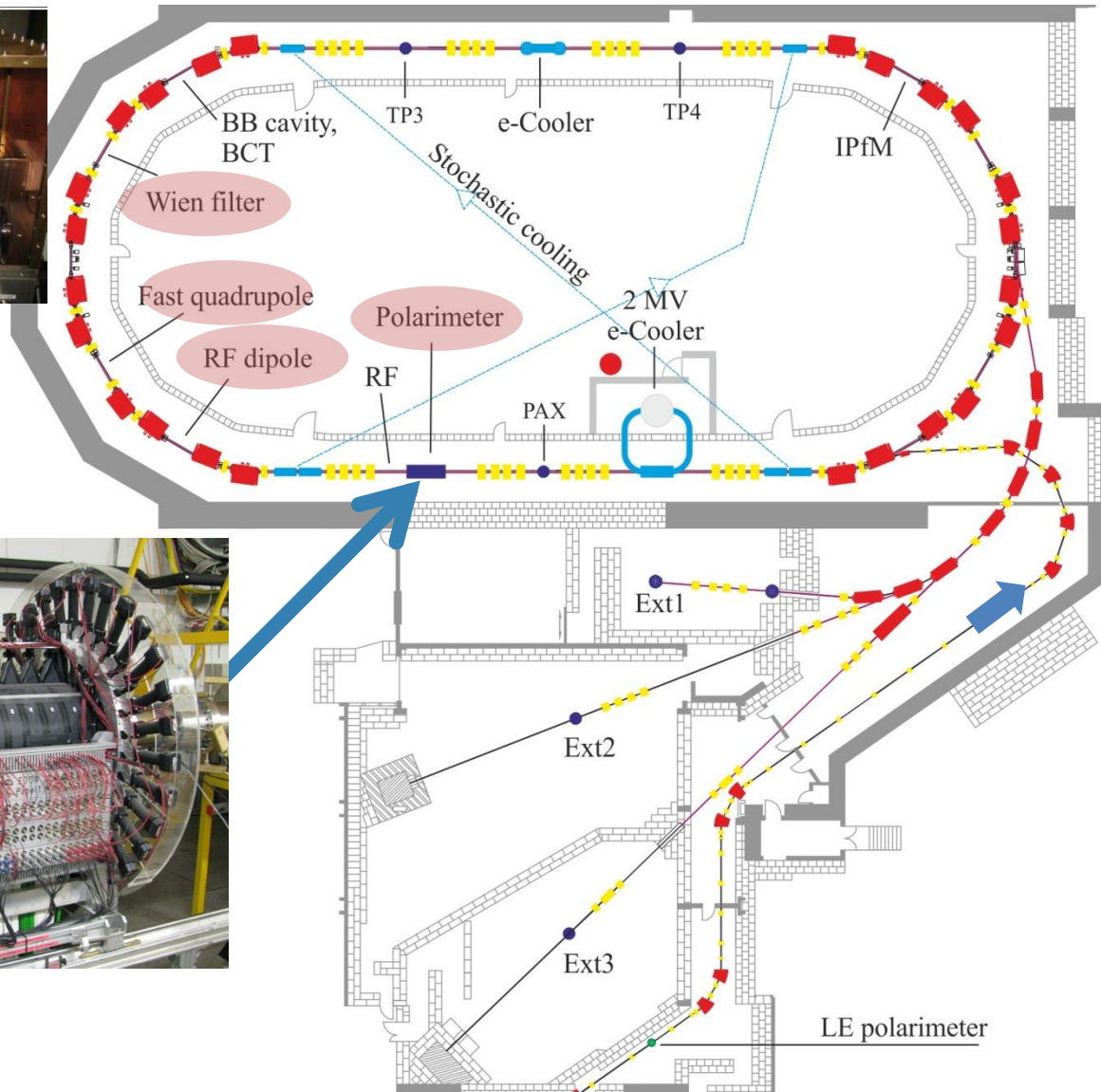
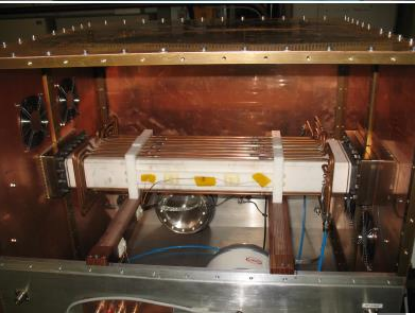
# COSY

## Floor plan



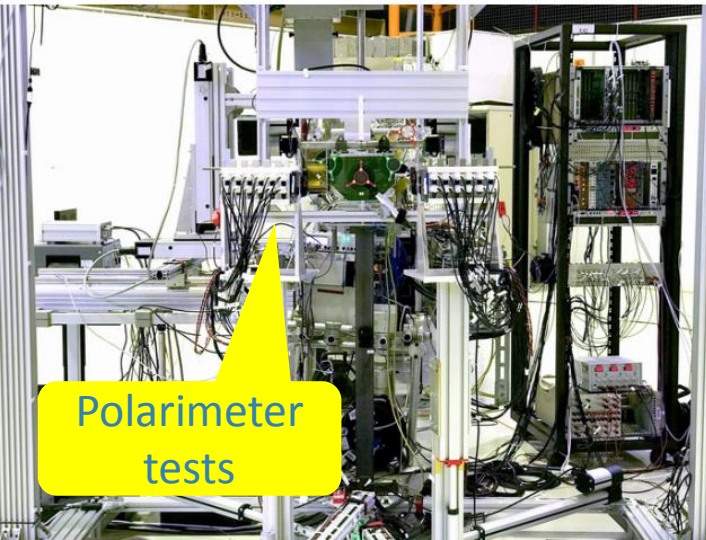
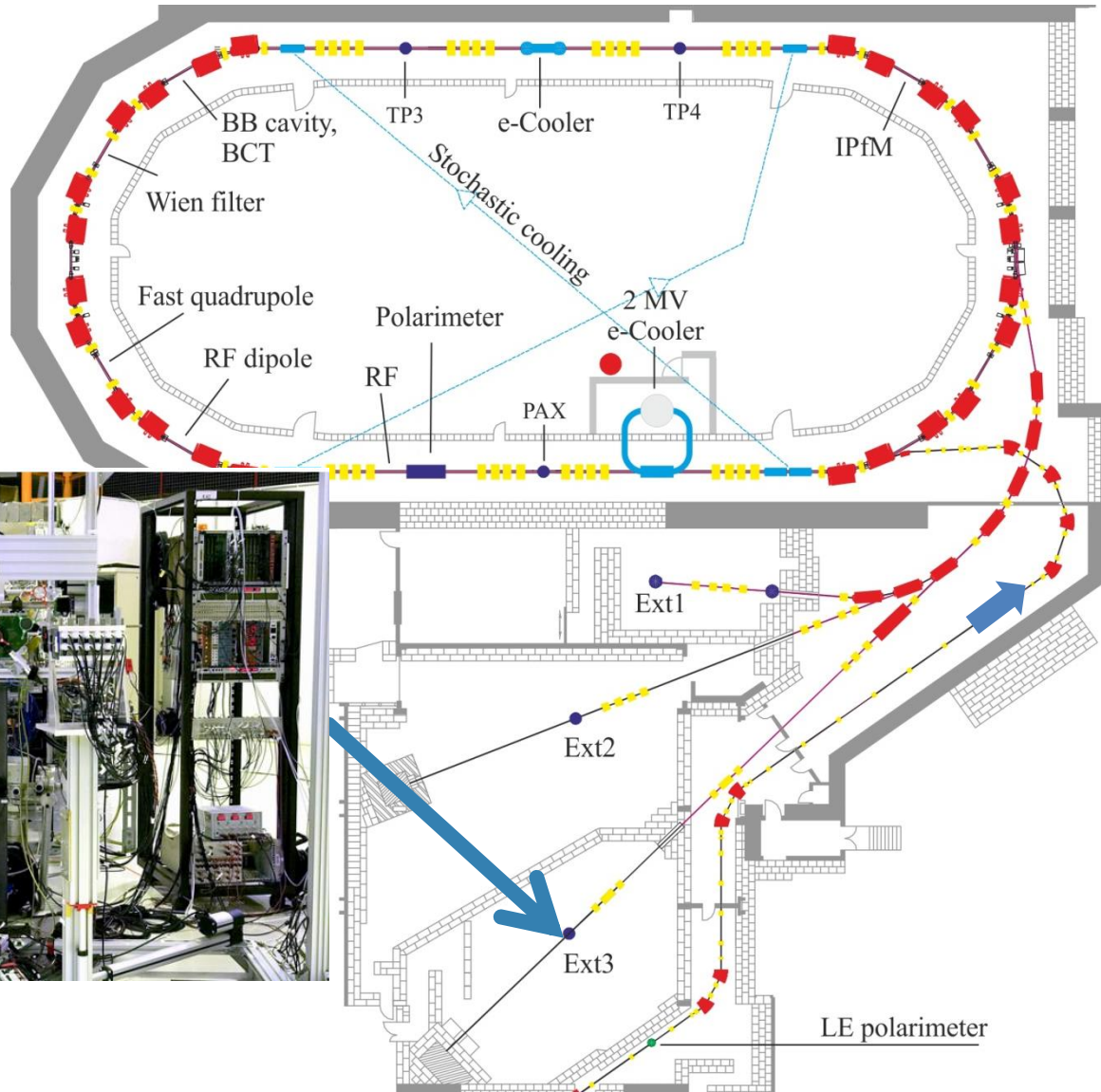
# COSY

... existing *spin physics* equipment



# COSY

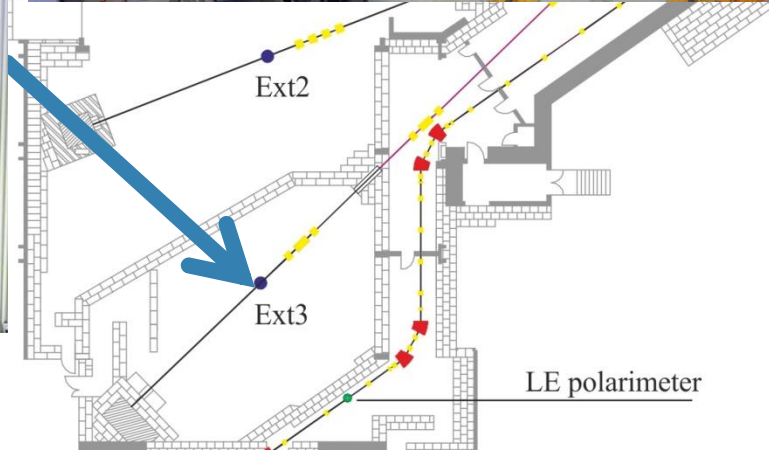
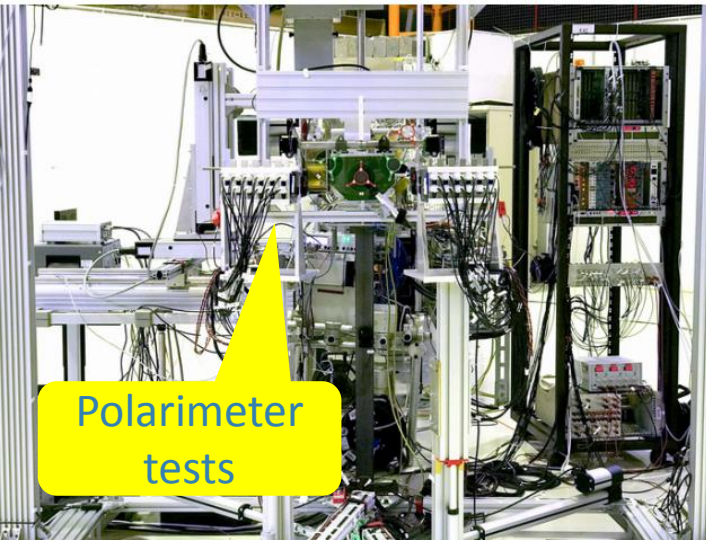
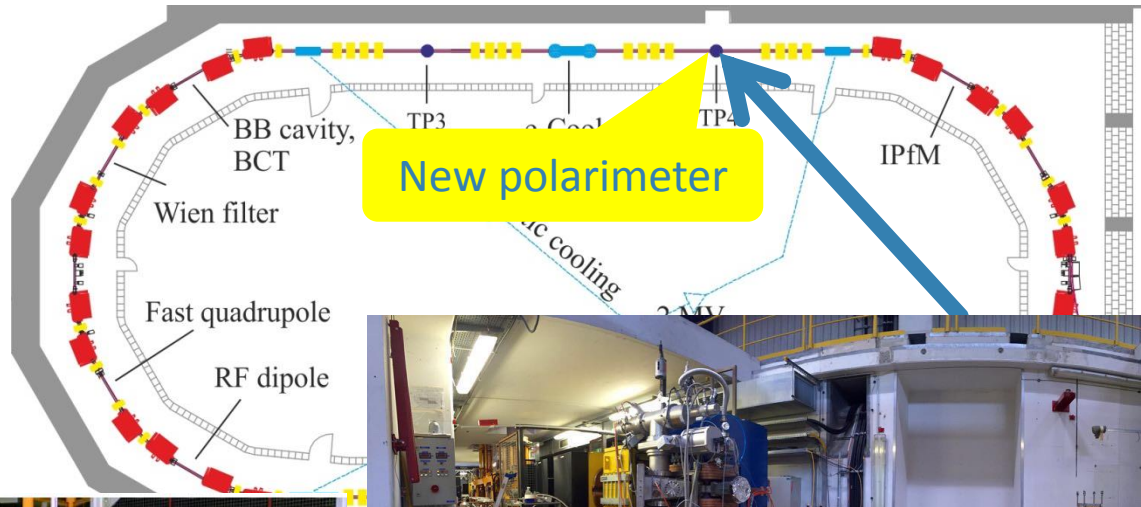
... test areas



Polarimeter tests

# COSY

... test areas



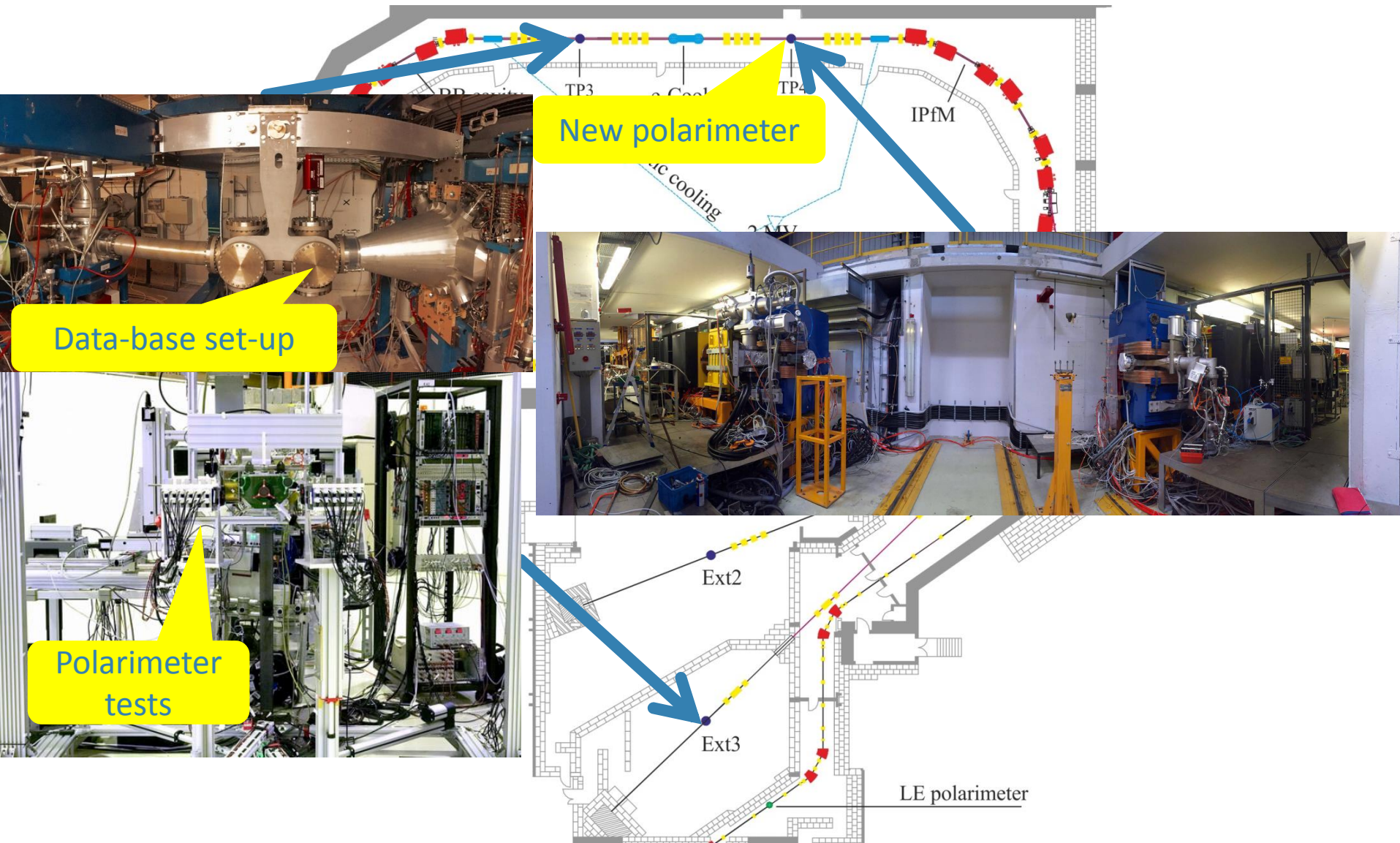
Polarimeter tests

New polarimeter

LE polarimeter

# COSY

... test areas





# COSY

... set-up for precursor experiment

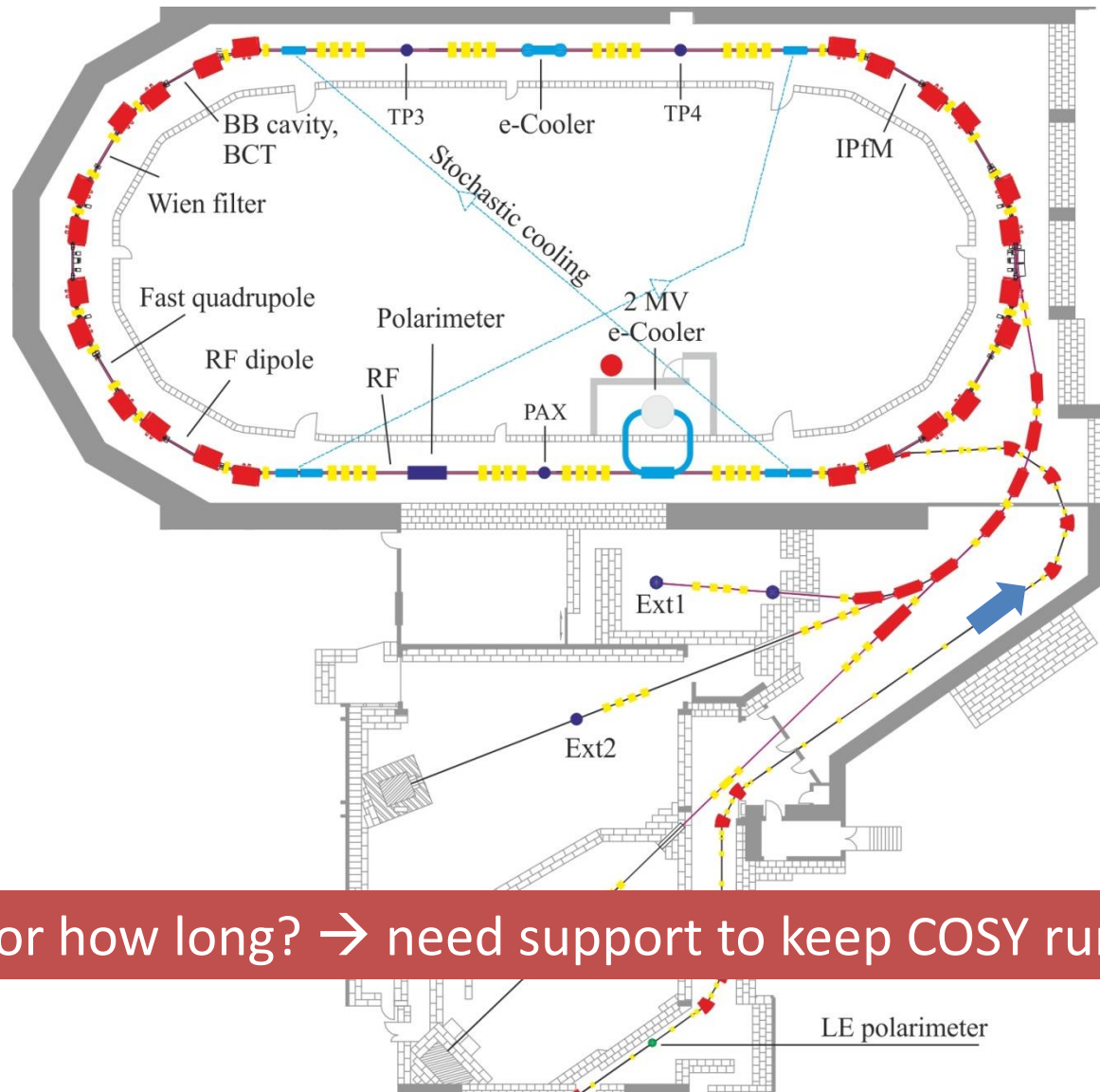
The central schematic illustrates the particle path through the COSY accelerator. Key components labeled include: BB cavity, BCT; TP3; e-Cooler; TP4; IPfM; Stochastic cooling; Polarimeter; RF; PAX; 2 MV e-Cooler; and Ext2. A yellow callout bubble points to the RF Wien filter section with the text "Installation of RF Wien filter".

The four inset photographs show:

- Top-left: A 3D CAD model of a large cylindrical component, likely a cavity or cooler, mounted on a support structure.
- Top-right: A photograph of the same cylindrical component in a laboratory setting, mounted on a metal frame.
- Bottom-left: A 3D CAD model of a blue perforated metal structure, possibly a Wien filter or a diagnostic component.
- Bottom-right: A photograph of a large circular flange with a complex internal assembly, being worked on by a blue robotic arm.

# COSY

... the only (operational) test facility for  $\overline{\nu}_e$  EDM



But for how long? → need support to keep COSY running!

# COSY

One aim for this meeting:

Identify what needs to be done at COSY in the upcoming years

