



21 PARTNER COUNTRIES

an international collaboration with an intergovernmental convention

13 Member states:

France	27.5 %
Germany	24.0 %
Italy	13.2 %
United Kingdom	10.5 %
Russia	6.0 %
Benesync (Belgium, The Netherlands)	5.8 %
<i>Nordsync</i> (Denmark, Finland, Norway, Sweden)	5.0 %
Spain	4.0 %
Switzerland	4.0 %

9 Scientific Associate countries:

Israel	1.75 %
Austria	1.75 %
Centralsync (Czech Republic, Hungary)	1.05%
Poland	1.0 %
Portugal	1.0 %
India	0.66 %
South Africa	0.3 %

ESRF
Grenoble
France

The first 3rd generation synchrotron radiation source

The first 4th generation high energy synchrotron radiation source!

Budget: ~ 100 M€

Fundamental, applied and industrial research: large variety of a applications



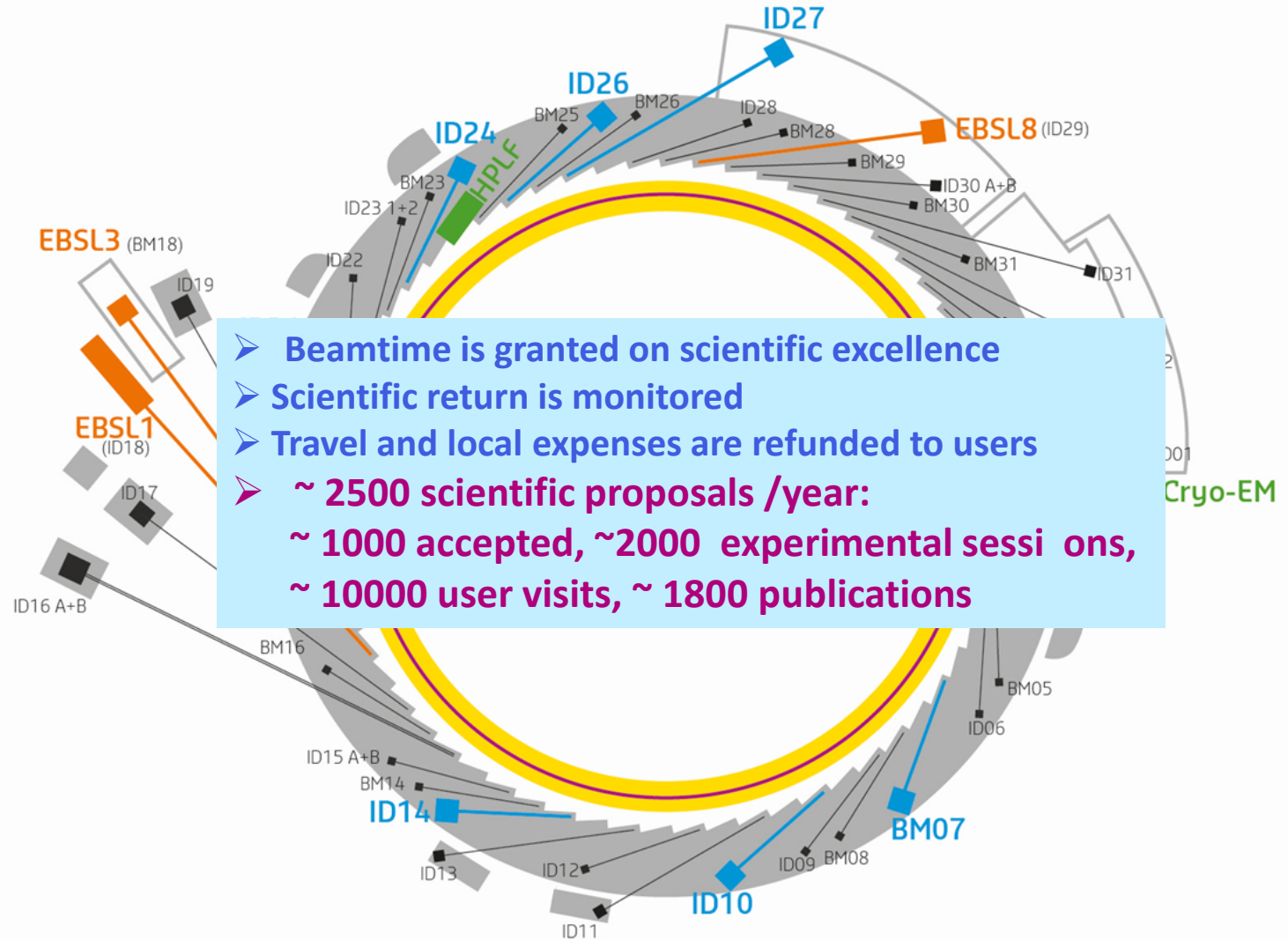
6 GeV high energy storage ring

32.5 ESRF Beamlines
13 CRG Beamlines

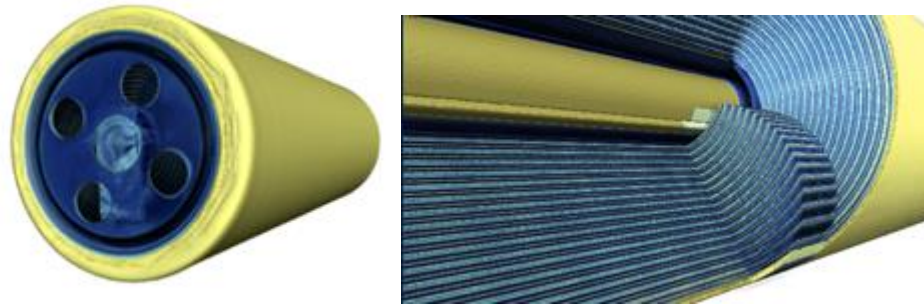
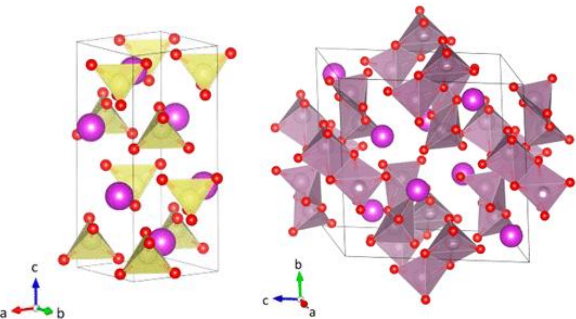
(Teams from Member States)

Imaging
Diffraction
Scattering
Spectroscopy

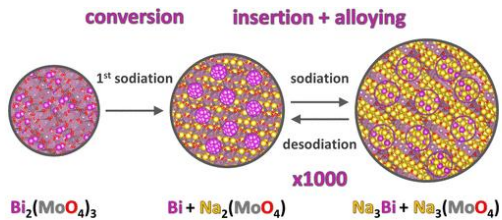
nm – μm – mm – cm
beam size



From Basic Science to broad Application

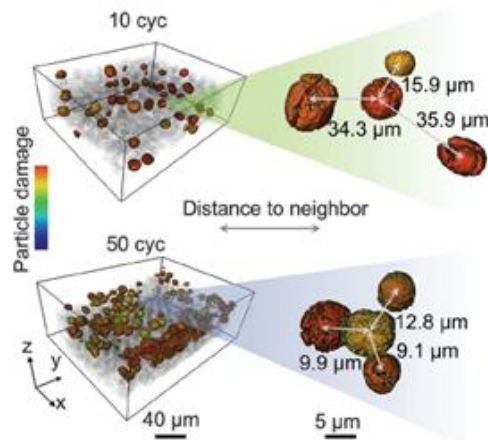


Courtesy of P. Tafforeau / S. Zabler



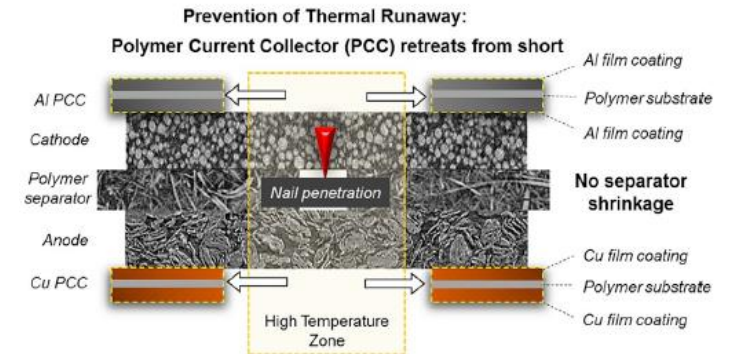
Materials development

Sottmann, *Chem. Mater.* (2017)



Materials stability

Li, *Science* (2022)



Device performance

Pham, *Cell Rep. Phys. Sci.* (2022)