

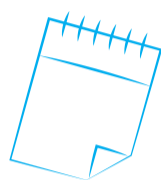
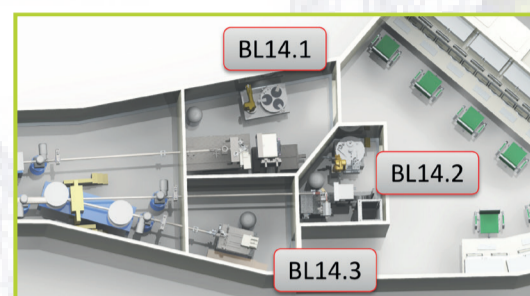
BESSY II AT HZB: MX-BEAMLINES

22.07.2002: the beam shutter at the MX beamline was set to ON for the first time, allowing **the first beam of light to enter the beamline.**

2003

2002

Initially only two beamlines were available to users; a third beamline was added later on. Our MX beamlines are located at Sector 14 of BESSY II and are therefore called **BL 14.1, BL 14.2 und BL 14.3**



2006

Microdiffractometer on BL 14.1: this is a fully automated instrument able to measure extremely small samples down to 20-25 micrometres, about half the thickness of a single hair.

First automatic sample changer (CATS) on BL 14.1.

In 2010: **founding of the Joint MX Lab** with now a total of 6 scientists on site. The HZB MX stations are the most productive of their kind in Germany.

2008

2009

2010

2011

First PILATUS detector for BL 14.1: this enables even more precise insights into the complex folds in the building blocks of life.

1000th deposited structure. It is a protein from the class of sirtuins that plays a role in ageing, stress & metabolic processes in the human organism. This protein structure was deciphered by researchers from the University of Bayreuth.

500th deposited structure: protein kinase Pim-1. This protein is produced at higher levels in some types of cancer. Its structure was deciphered by a team from Bayer HealthCare Pharmaceuticals (Berlin).



2013

2015

Second PILATUS detector: new goniometer and sample changer (GROB) on BL 14.2.

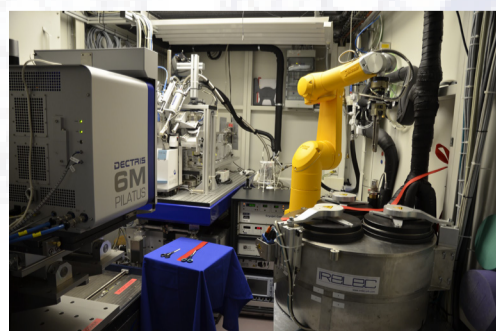
3000th deposited structure

2019

Third PILATUS detector on BL 14.1: this detector makes it possible to record complete data sets for complex proteins within minutes.

First remotely conducted experiment on BL 14.1.

More than 3670 deposited protein structures (as of May 2021). In spring the MX-team counts 12 people.



2020

2021

