

HIC for FAIR

Universities meet Laboratories (EuCARD²)
Frankfurt am Main, 30.9. and 1.10.2014

Joachim Stroth, Goethe University / GSI

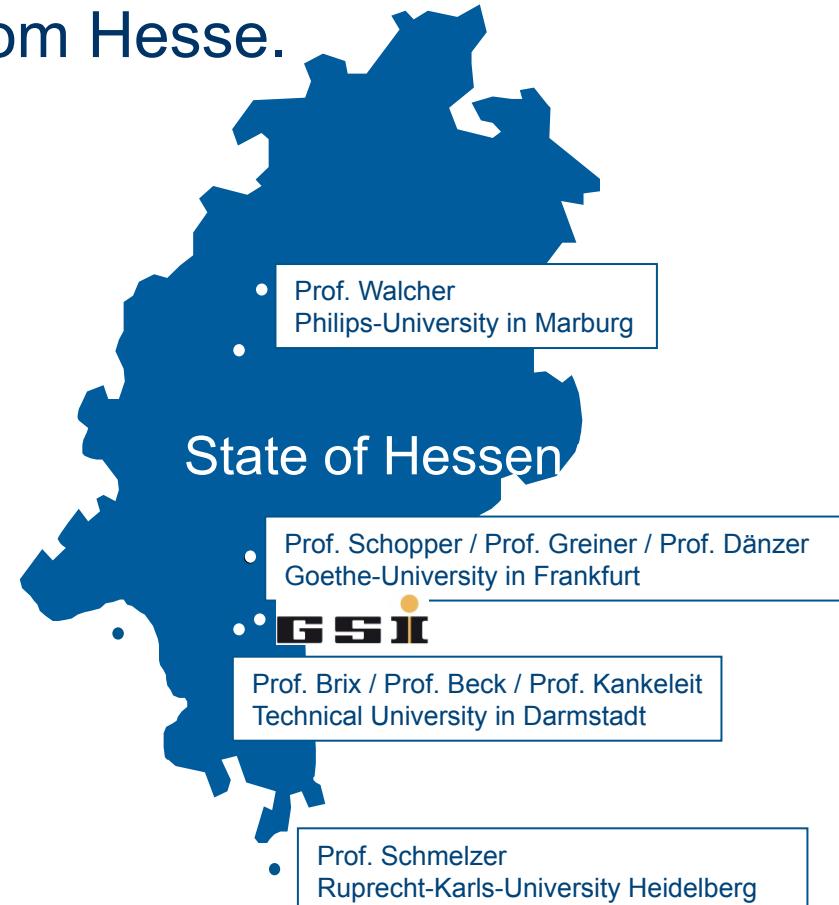


GSI as Joint Research Infrastructure

GSI was founded in the late 60th upon an initiative of university professors from Hesse.

Focus: Heavy-ion Physics

- Accelerate heaviest ions to above the Coulomb Barrier
 - Super-heavy elements
 - QED in critical fields
- Realize linear accelerator developed by Prof. Schmelzer



The Excellence Initiative of the State of Hesse

LandesOffensive

zur

Entwicklung

Wissenschaftliche-ökonomischer

Exzellenz



LOEWE

Exzellente Forschung für
Hessens Zukunft

- Support for Universities and Research Institutes
- Competitive program
- 430 MEUR between 2008 and 2013

LOEWE Center HIC for FAIR

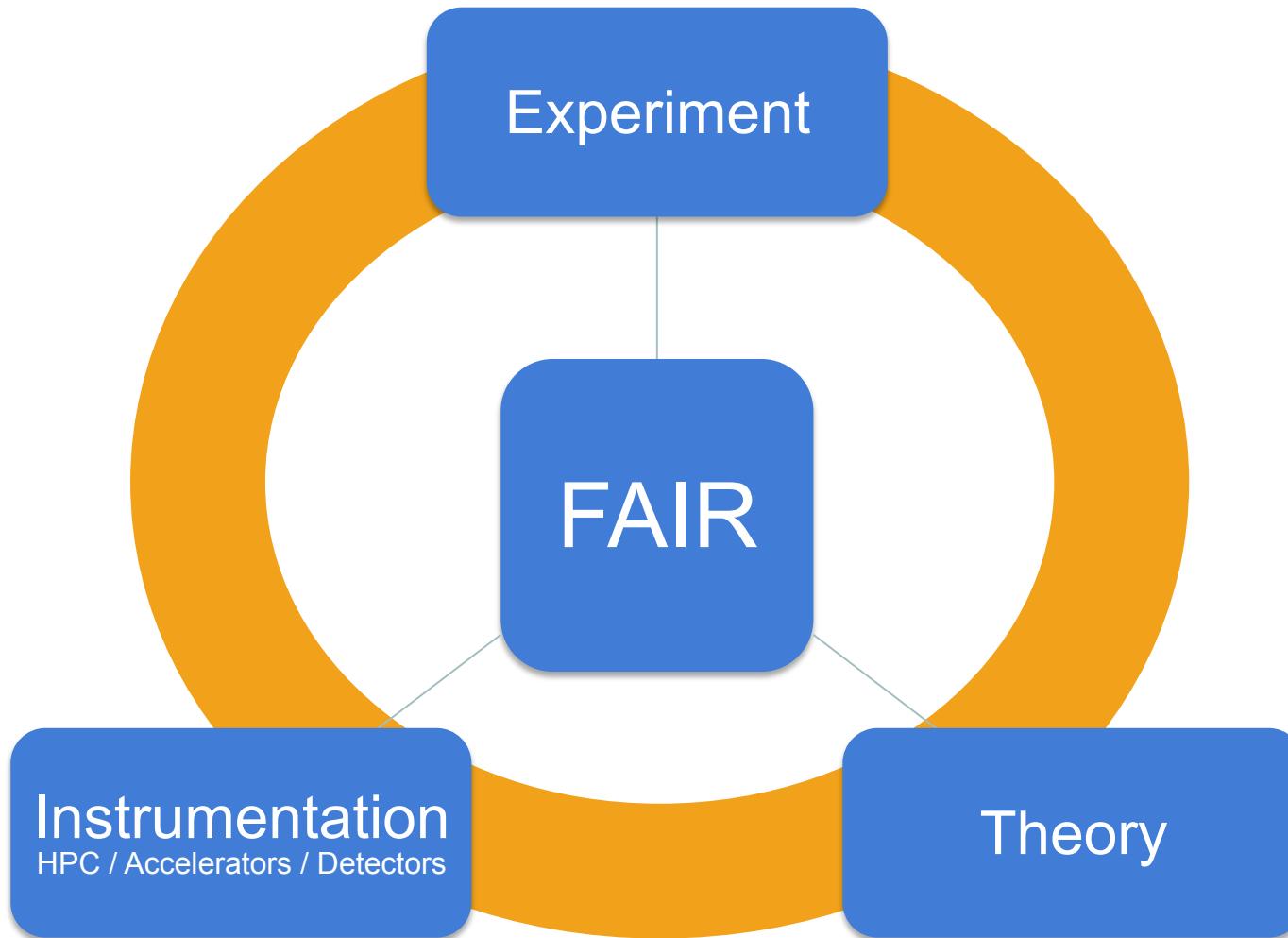
- Proposed and funded in 2008

- Mission statement:

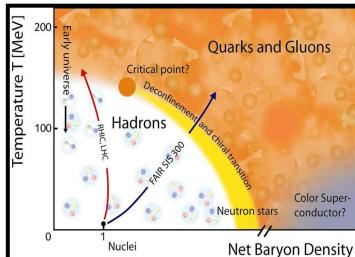
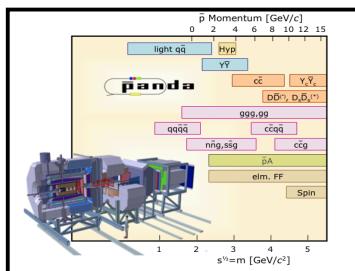
strengthen university groups working on FAIR related physics and instrumentation -> Think Tank for FAIR



HIC for FAIR concept



The HIC for FAIR Research Pillars



Hadron structure and dynamics

PANDA

Nuclear and quark matter

CBM

Nuclear astrophysics and exotic nuclei

NUSTAR

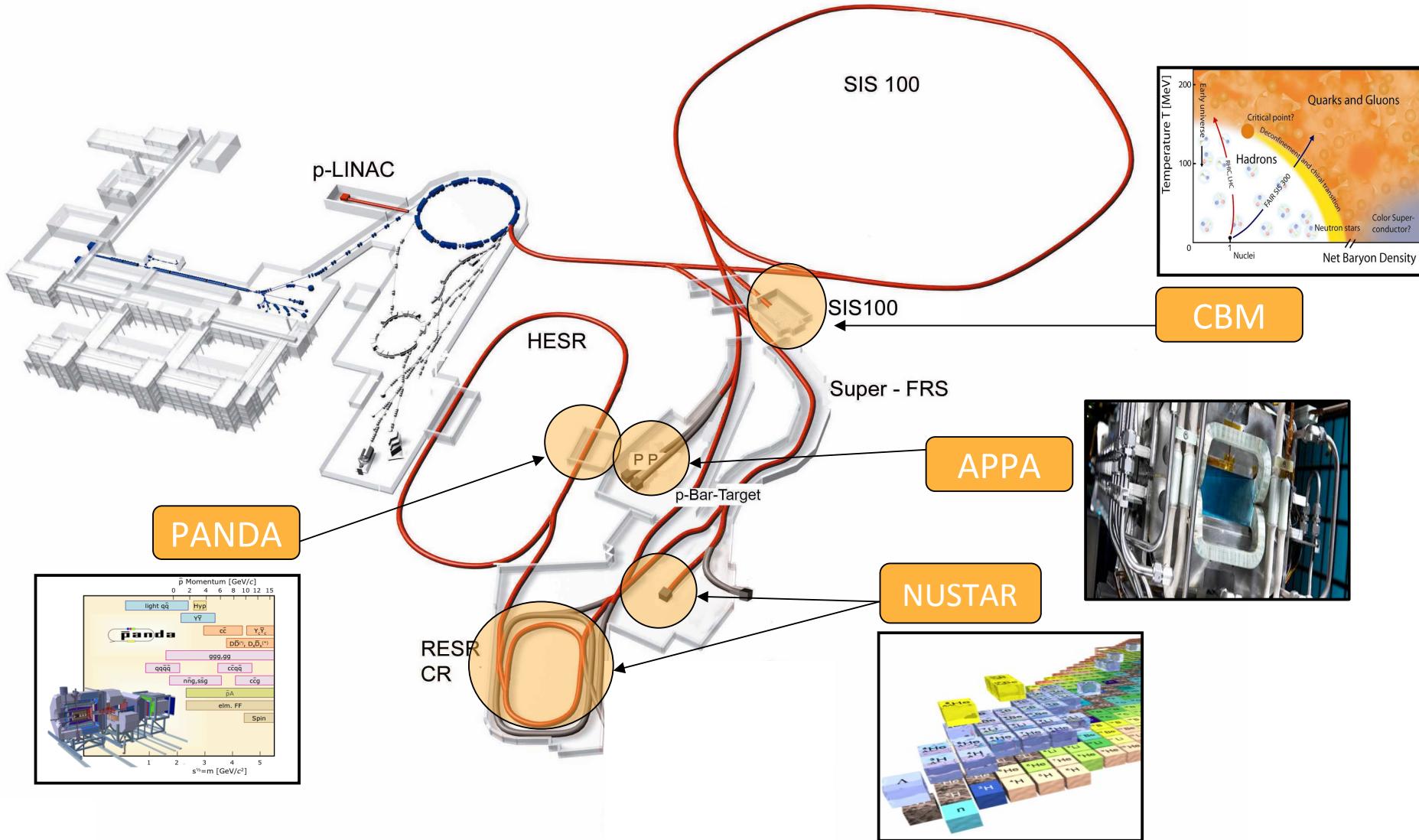
Atomic physics, plasma physics, applications

APPA

Accelerator development and high performance computing



The FAIR Facility

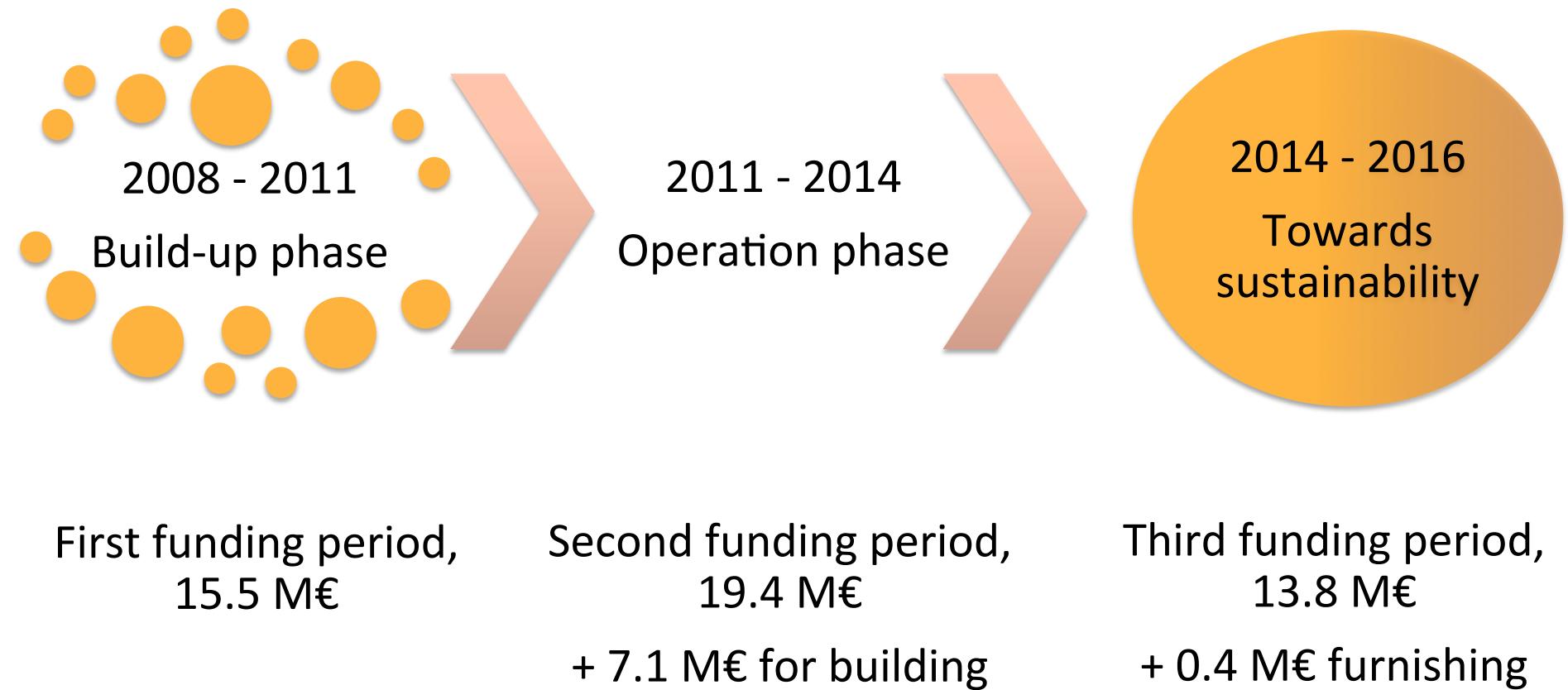


Partners of HIC for FAIR

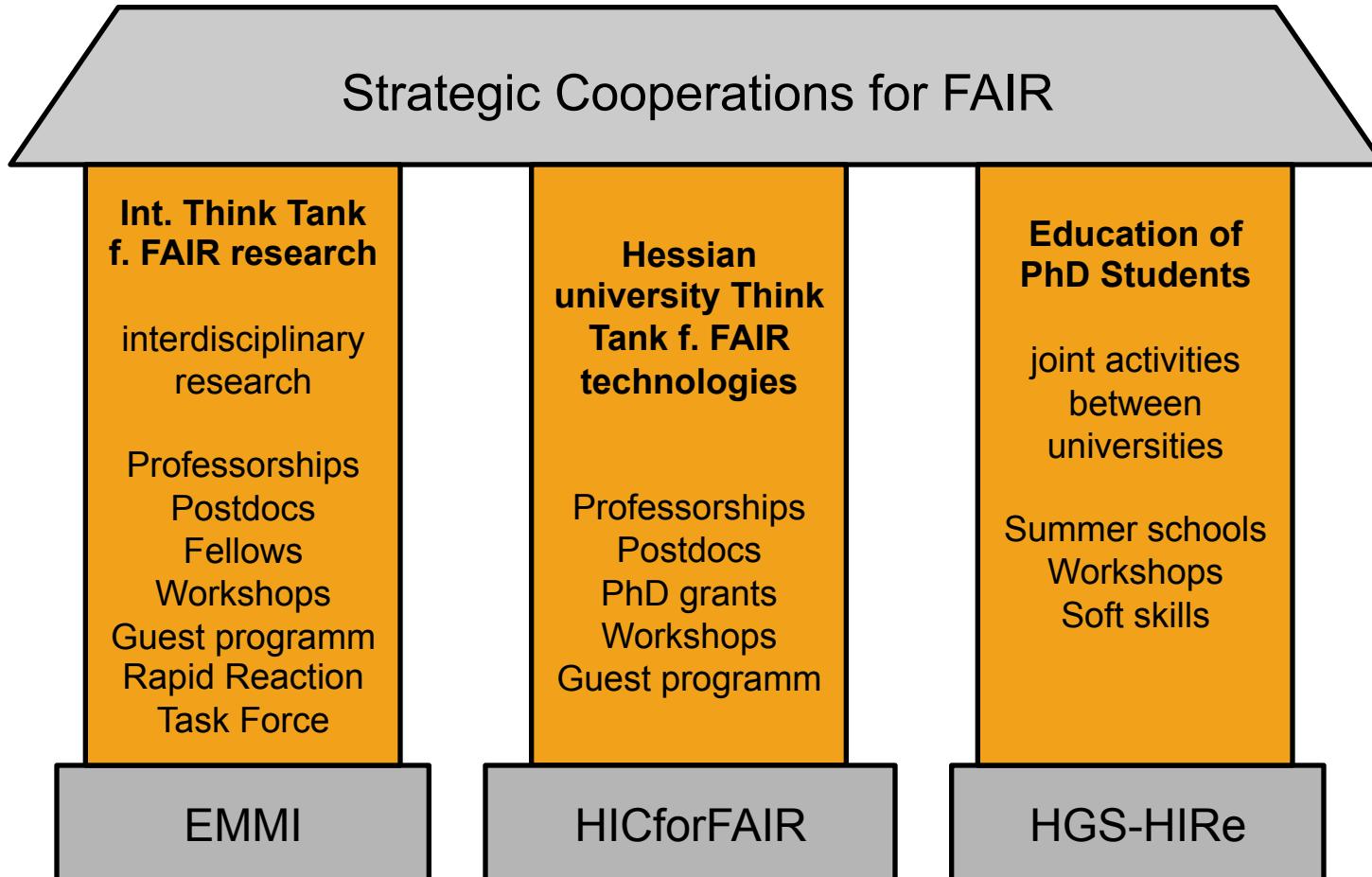


- **JLU Gießen**
 - I. Physikalisches Institut
 - II. Physikalisches Institut
 - Institut für Theoretische Physik
 - Institut für Angewandte Physik
- **GU Frankfurt**
 - Institut für Angewandte Physik
 - Institut für Kernphysik
 - Institut für Theoretische Physik
 - Institut für Mathematik und Informatik
- **Frankfurt Inst. for Adv. Studies (FIAS)**
- **TU Darmstadt**
 - Institut für Kernphysik
 - Institut für Theorie Elektromagnetischer Felder
 - Institut für Festkörperphysik
 - Institut für Materialwissenschaften
 - Fachbereich Biologie
- **GSI/FAIR/Helmholtz Gemeinschaft**

HIC for FAIR Funding Periods

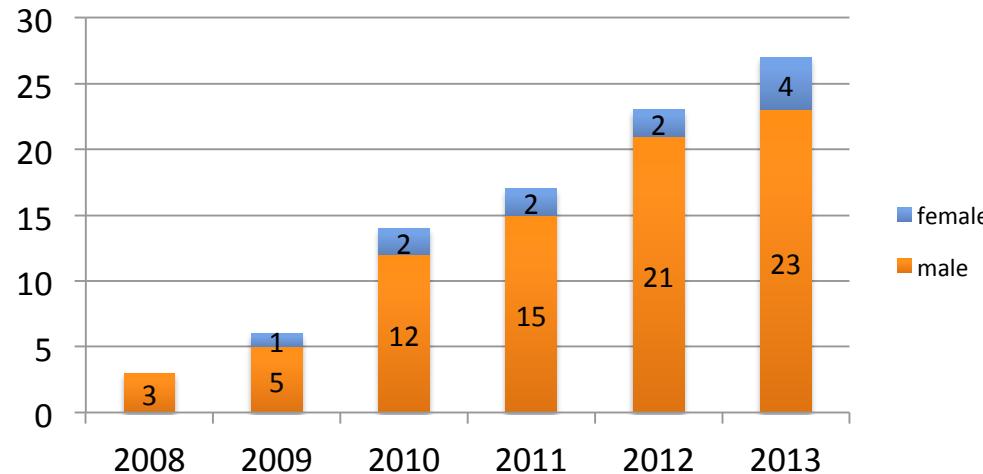


Structured programs and GSI/FAIR



HIC for FAIR Recruiting Activities

LOEWE Professors



Structured PhD Education

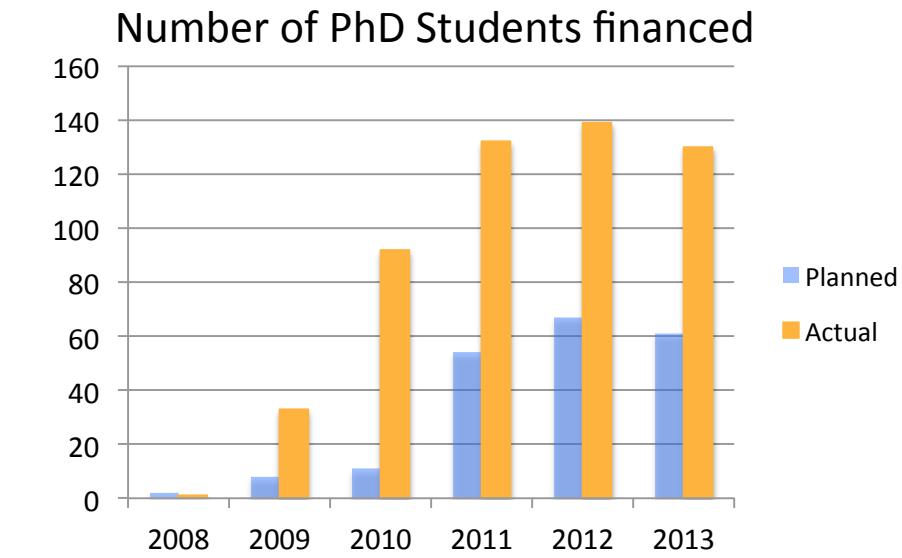
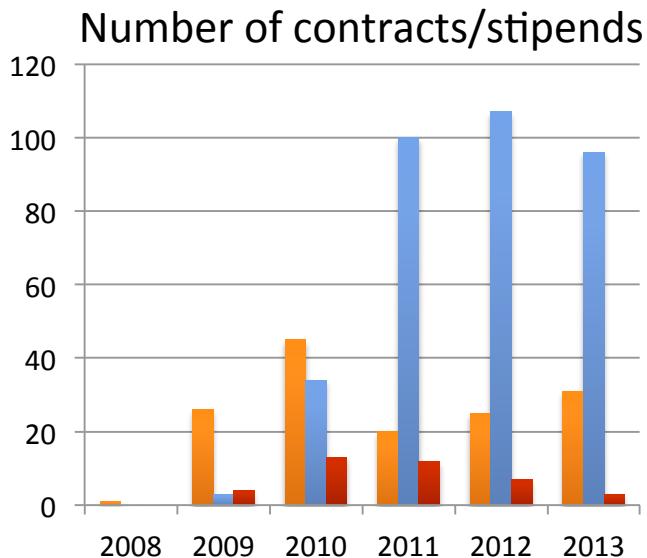


HGS-HIRe *for FAIR*

Helmholtz Graduate School for Hadron and Ion Research

- Common standards
- Admission/selection handling
- Soft skill training
- Lecture weeks, Power weeks
- Total: 193 HIC for FAIR students
- Currently: 130 PhD students

Structured PhD Education



- Majority financed by stipends (bilateral GSI contracts)
- Active participation in FAIR R&D
- Nearly 2/3 in the experimental areas
- From 27 nations