

The Technology Platform of the DRESDEN-concept

<http://technologieplattform.dresden-concept.de>

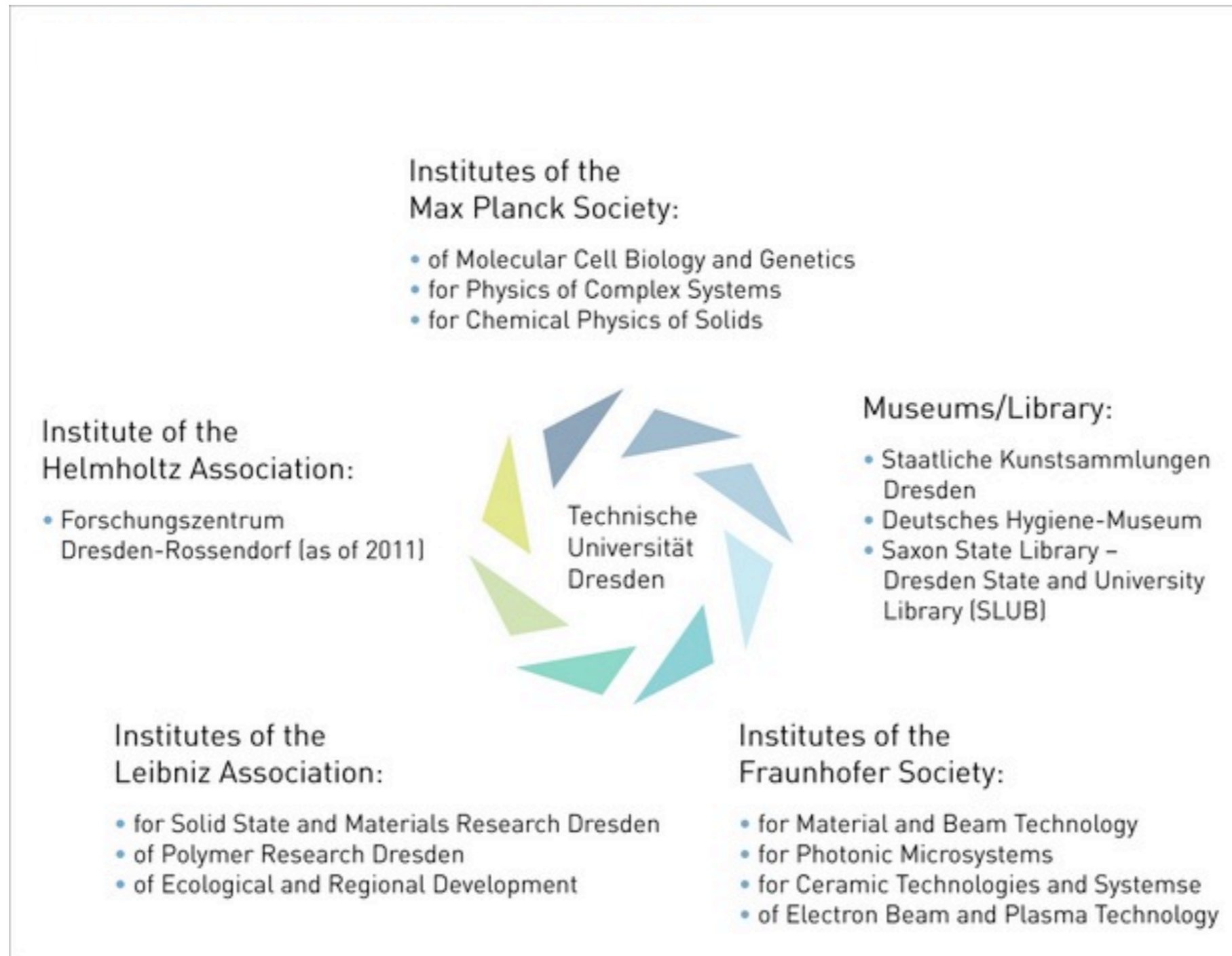
Dr. Matthias Fichtner (MPI-CBG)
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The DRESDEN-concept

- Dresden **R**esearch and **E**ducation **S**ynergies for the **D**evelopment of **E**xcellence and **N**ovelty
- <http://www.dresden-concept.de>
- Goals:
 - To make the excellence of research in Dresden visible
 - To collaborate in research, education, infrastructure and administration
 - To define common key areas of research
 - To found graduate schools
 - **To exploit synergies, e.g. in sharing infrastructure (labs or equipment) and in teaching**

DRESDEN-concept: Partners



Technology Platform

Goals:

- To provide scientific **equipment, services and technologies** that are available at one of our partners for research and booking in a **central, common database**.
- To ease the access to expensive research infrastructure among all partners using a common financial, legal and administrative model.
- To increase the rate of utilization of expensive equipment.
- To facilitate synergies and collaboration across institutes.

Organization

- Booking: centrally or distributed
- Accounting: distributed, i.e. in-house
- Financial incentives

Content

- ✓ Detailed profiles of **scientific instruments** incl. terms of use
 - Detailed profiles of **scientific services**
 - Detailed profiles of scientific technologies and methods
- ✓ **Expert profiles**, point of contact + hierarchy of institute / structural units

- ✓ ... available today
 - ... planned

- for the time being only English, later German, too

Functionalities

- ✓ Managing profiles manually
 - ⦿ Synchronizing / connecting with distributed databases
 - ⦿ Search
 - Central booking system,
integration of distributed booking systems
 - Distributed accounting system
 - ⦿ Distributed user authentication,
local permission mgt.
-
- ✓ ... available today
 - ⦿ ... available today partly

Demo

<http://technologieplattform.dresden-concept.de>

Available Functionalities Regarding Equipment

Profile for each instrument:

- Details: name, manufacturer, model, spec., owner, terms of use, visibility restriction (institute / alliance / none)
- Functions: browse*, show, full-text search*, add / edit / delete; add & delete images & datasheets

* ... Depending on whether the user is logged in, which institute he/she is affiliated with and at which level an instrument is shared, he/she will find more or less results.

Available Functionalities Regarding Equipment

- Points of contact for each instrument:
 - Contact details of institute are inherited
 - Personal point of contact (optional): add / edit / delete
 - Details: name, email, phone, fax, structural unit
 - Only published if allowed
 - Import from staff database

Available Functionalities Regarding Structural Units

Profile for each institute & structural unit:

- Details: contact details, expertise, hierarchical affiliations
- Functions: browse, show, search & full-text search, add, edit, delete

Available Functionalities Regarding Users

Roles:

- kinds: staff, admin, moderator, superuser
- Local mgt. of roles by institutes themselves

User account mgt.:

- For partners not connected with the TP:
 - Local user mgt. by institutes themselves
- For partners connected:
 - The users' own institute grants access to the TP via secure connection (SAML).

Technologies Behind

Database: MySQL + Doctrine

- relational, object relational mapping, database abstraction layer

Web application: Zend

- model-view-controller

Search engine: Lucene, elasticsearch

- local, distributed, suggestive, multi-lingual, facets, highlighting

User interface:

- XHTML, CSS, Javascript, jQuery, YAML

User authentication: simpleSAMLphp

- SAML 2.0, single sign-on, encrypted

Features: Outlook

- Suggestive, interactive full text search
- Further content types: services, technologies & methods
- RESTful sync. / import / export interfaces
- Full integration with existing databases
- Single sign-on & attribute sync.
- Multilingual interface & content & search
- Workflow of editing
- Rating system for facilities, instruments & users

Thank you for your interest!

We'd like to hear your feedback!

Point of Contact:

- <http://technologieplattform.dresden-concept.de>
E-Mail: technologieplattform@dresden-concept.de
- Dr. Matthias Fichtner
Tel: +49-351-46333738
E-Mail: fichtner@mpi-cbg.de