

### Registration

Regular: The fee is  $120 \in$  which covers lectures, coffee breaks and a social event.

Registration can be made by returning the application form which is available on http://www.itep.kit.edu/hts4fusion2011

The number of participants to the workshop is limited (first-come/first-served)

# **Hotel Reservation**

A block of rooms has been reserved at

 hotel Kübler in center of Karlsruhe (single room 74€ incl. breakfast) http://www.hotel-kuebler.de

and at

 hotel Schröcker Tor in Leopoldshafen near KIT Campus North (single room 40 € incl. breakfast) <u>http://www.hotel-schroecker-tor.de</u>

Please book your hotel exclusively through Mrs. R. Rotondo E-Mail: **Rosa.Rotondo@KIT.edu** 

## Contact

Please send your application form before April 30th to

Mrs. R. Rotondo Karlsruhe Institute of Technology Institute for Technical Physics 76344 Eggenstein-Leopoldshafen / Germany Phone: +49 (0) 721 608 24294 FAX: +49 (0) 721 608 9 24197 E-Mail: **Rosa.Rotondo@KIT.edu** 

## Location

The workshop will be held at KIT Campus North, about 10 km North of Karlsruhe center, Germany (former Forschungszentrum Karlsruhe)





# **HTS<sup>4</sup>Fusion Conductor Workshop**

High T<sub>c</sub> Superconductors at High Current and High Fields for Fusion Application



May, 26<sup>th</sup> and 27<sup>th</sup> **KIT** C.N. Karlsruhe Germany http://www.itep.kit.edu/hts4fusion2011

www.kit.edu



# **HTS<sup>4</sup>Fusion Conductor-Workshop**

Time: Location: May 26<sup>th</sup> – 27<sup>th</sup> Karlsruhe, Germany, KIT C. N.

Day 1	End	Title	Presenter	Торіс
8:30	8:35			Welcome
8:35	8:55	Introduction to HTS4Fusion	W.H. Fietz (KIT)	Intro
8:55	9:40	Roadmap to DEMO and Related Technological Challenges	G. Federici (EFDA)	DEMO
9:40	10:10	Which SC Magnets for DEMO and Future Fusion Reactors ?	J-L Duchateau (CEA)	DEMO
10:10	10:35			Coffee
10:35	11:20	Overview of HTS Material and MgB2	R. Flükiger (Geneva)	HTS Materials 1
11:20	12:05	Coated Conductors	V. Selvamanickam (Houston)	HTS Materials 2
12:05	13:20			Lunch
13:20	13:50	MgB2 + BiSCCO	S. Schlachter (KIT)	Cable Concepts I
13:50	14:35	REBCO Cables	W. Goldacker (KIT)	Cable Concepts II
14:35	15:20	HTS and Cable Concepts	J. Minervini (MIT)	Cable Concepts III
15:20	15:45			Coffee
15:45	16:30	Joints with HTS Materials	N. Yanagi (NIFS)	Joints
16:30	17:15	Thermal Stability and Quench	R. Wesche (CRPP)	Electr. & Mechan. Stability I
17:15	18:00	Mechanical and Electrical Stability	A. Nijhuis (Twente)	Electr. & Mechan. Stability II
19:30				Dinner

Day 2	End	Title	Presenter	Торіс
8:30	9:15	Mechanical stability	KP. Weiss (KIT)	Electr. & Mechan. Stability III
9:15	10:00	AC Losses	F. Gömöry (IEE)	AC Loss I
10:00	10:25			Coffee
10:25	11:10	AC Losses	F. Grilli (KIT)	AC Loss II
11:10	11:55	Radiation Effects on HTS	H. Weber (ATI)	Irradiation
11:55	12:25	Summary and Closing Remarks	M. Noe (KIT)	Closing Remarks



# Profile

#### **HTS<sup>4</sup>Fusion Conductor Workshop**

targets the development of a HTS high current & high field conductor that answers the needs for fusion application. After clarifying the boundaries for DEMO, the status of HTS material and ideas for cable concept are addressed. Joint formation, electrical and mechanical stability, AC loss optimization and irradiation issues will be discussed.

# Organization

#### **HTS<sup>4</sup>Fusion Conductor Workshop**

is organized by KIT, Institute for Technical Physics (responsible Walter.Fietz@KIT.edu)

### **Program Committee**

The program committee takes care of the scientific organization and consists of

- Piereluigi Bruzzone, CRPP
- Antonio Della Corte, ENEA
- Jean-Luc Duchateau, CEA
- Walter Fietz, KIT
- Wilfried Goldacker, KIT
- Harald Weber, ATI