



# The virtuous circle of knowledge and innovation



# The Virtuous Circle of Knowledge and Innovation

Host: **Paola Catapano**

Speakers: **Alain Aspect, Tabea Arndt,  
Amalia Ballarino, Reinhold Bertlmann,  
Daniela Bortoletto, Nicolas Gisin, Michele Grossi,  
Jan Jakubek, Steffen Kappler, Alessandra Lombardi**



# Superconductivity – “accelerated” developments in Power Applications

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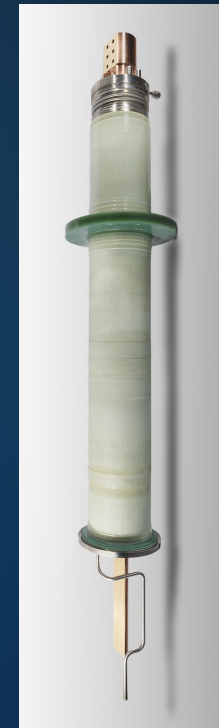
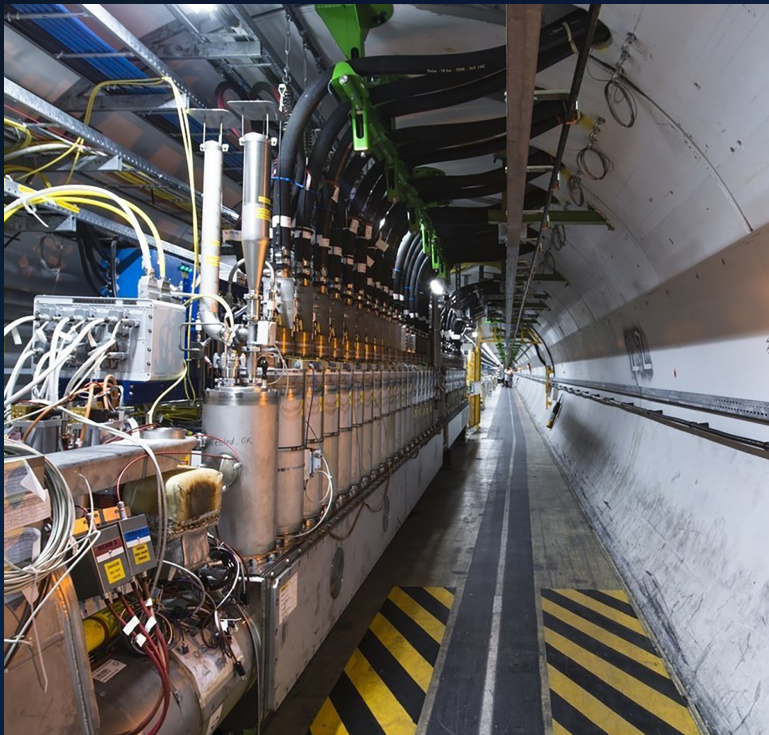
**Tabea Arndt**

KIT – The Research University in Helmholtz

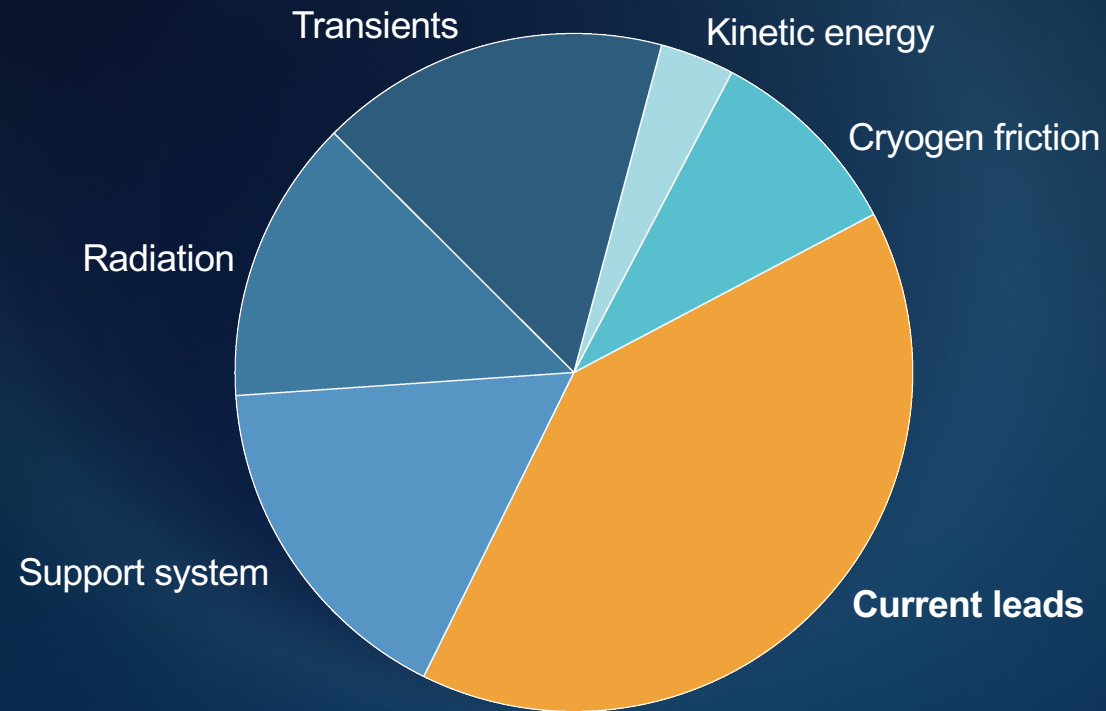




# Current leads from the LHC to Fusion And other applications



# Heat loads – (in rotating machines)



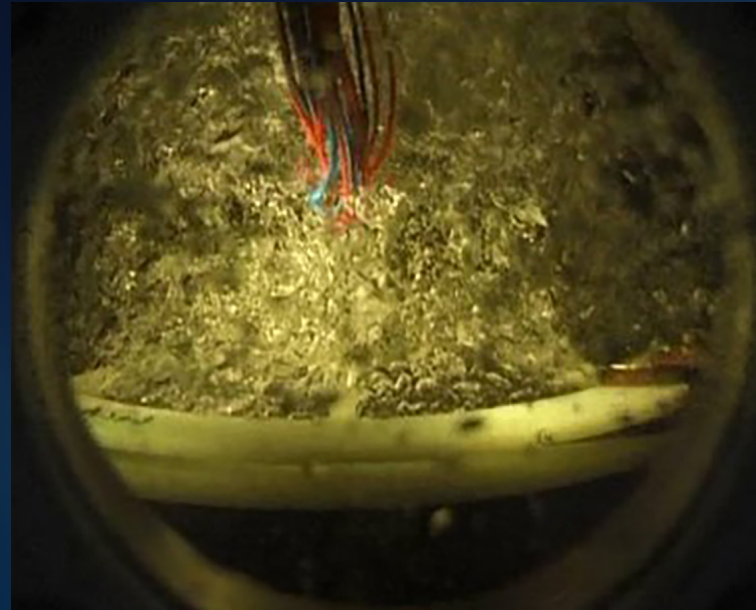
**Current leads are the major heat loads!**



# Fault current limiters



Stadtwerke Augsburg,  
Siemens



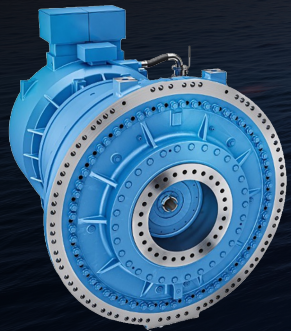
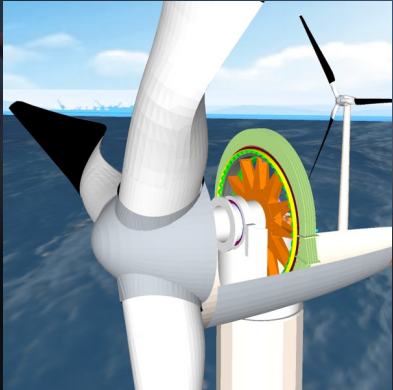
AmSC 2G-wire tested at Siemens



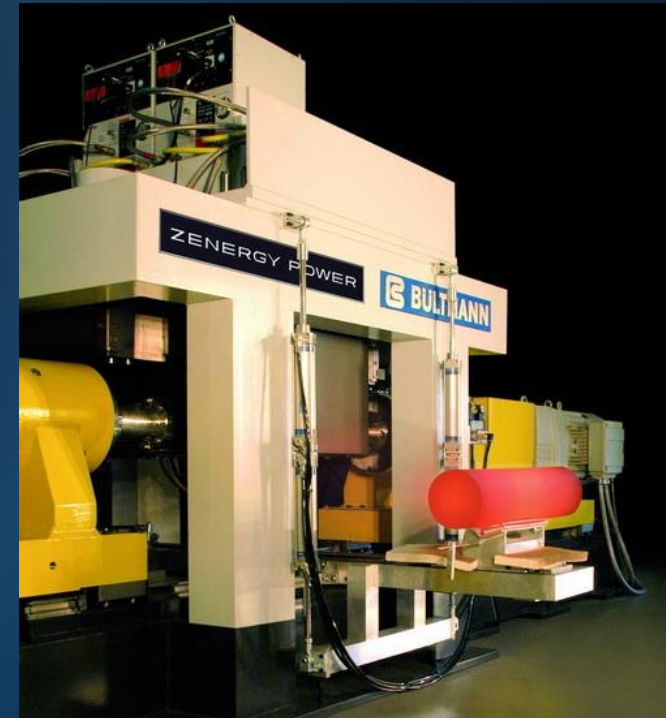
AmSC, Nexans, Siemens



# Windpower Generators

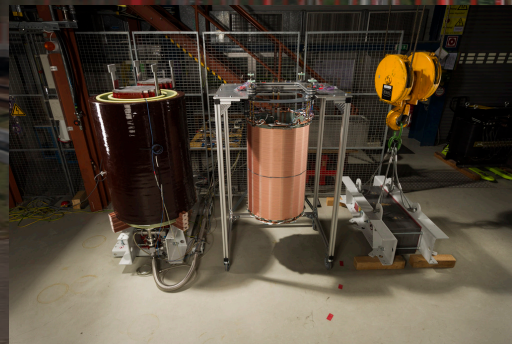


# Magnetic Billet Heaters

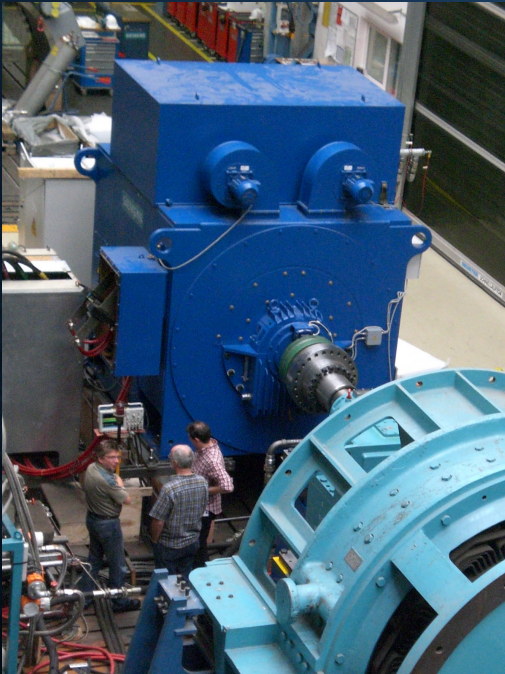


Zenergy, Bültmann

# Transformer



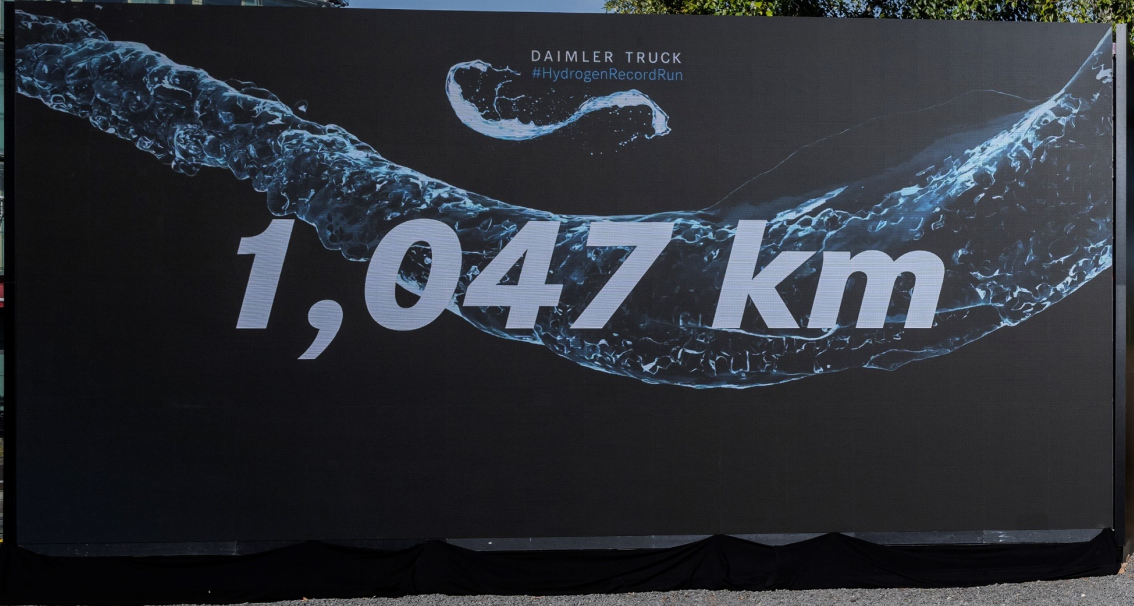
# Electric ships



Siemens



# ETruck



# Levitation & Transportation



# The SHiP experiment

