

SEMINARIUM Z MAGNETYZMU I NADPRZEWODNICTWA

Uprzejmie zawiadamiamy, że w **ŚRODĘ**

23 maja br., o godz. 10:00

w sali 203 (bud.1) odbędzie się seminarium, na którym

Mgr Pylyp Aleksyeyev

Instytut Fizyki PAN

wygłosi referat na temat:

„The ac susceptibility of type-II superconductors NbTi and Nb₃Al”

Streszczenie

A magnetic field harmonically varying in time (to probe the sample) and a lock-in or a bridge technique (to register the sample response sensed by a pick-up coil) are widely used for characterizing superconductors. Measuring the temperature and the dc magnetic field dependence of the complex AC susceptibility is the most common procedure of this type. The ac susceptibility measurements of NbTi and Nb₃Al conventional superconductors were performed to study absorption mechanisms of superconducting materials in magnetic fields up to 12 T. The non-linear response of superconducting material to ac field magnitude and ac frequency was found. The influence of possible modes of energy dissipation: viscous losses, bulk-pinning losses and surface losses upon the ac magnetic susceptibility of NbTi and Nb₃Al samples is discussed.

Serdecznie zapraszamy

Roman Puźniak

Henryk Szymczak

Andrzej Wiśniewski