

SEMINARIUM Z MAGNETYZMU I NADPRZEWODNICTWA

Uprzejmie zawiadamiamy, że w **środę**

2 września 2015 r., o godz. 11:00

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

Prof. Mikhail Feigelman

L.D. Landau Institute for Theoretical Physics, Moscow

wyłosi referat na temat:

"Strongly disordered superconductors and superconductor-insulator transitions"

I will review recent results on experiment and theory of strongly disordered superconductors with the emphasis on continuous (amorphous) materials. Two major mechanisms will be discussed: "fermionic" and "bosonic". While fermionic mechanism can be considered as a straightforward generalization of usual BCS superconductivity, bosonic mechanism leads to a number of unusual qualitative features: existence of a pseudogap already quite above the critical temperature, two energy scales seen in tunneling spectroscopy, strong suppression of the superfluid density (i.e. increase of kinetic inductance), and the presence of a huge magneto-resistance peak. I will provide semi-quantitative theory which is able to explain all the above features within a unified approach.

Serdecznie zapraszamy

Roman Puźniak
Henryk Szymczak
Andrzej Wiśniewski