progetto grafico: roberto perego | www.nonacaso.it

PHYSICS COLLOQUIA 2014

The historical and epistemological analysis of the phenomenon of superconductivity, one of the most brilliant discoveries of 20th century in Physics, is presented in the lecture. Starting from the historical prerequisites of this discovery the author discusses the difficulties in its studies, related to the necessity of recognition of the quantum and collective nature of this phenomenon, which delayed its microscopic understanding for 46 years. Considerable part of the talk is devoted to the events of the last 25 years, elapsed since the discovery of high temperature superconductors (HTS). This breakthrough seemed to conclude the 75 years long quest for superconductors with high critical parameters. Nevertheless, the enormous experimental progress in discoveries of new HTS materials, and the accumulation of extensive information concerning their nontrivial physical properties, have not yet been supported by the development of a unique reliable theory of this phenomenon.

04FEB Andrey Varlamov

SPIN-CNR, Roma, Italia

Superconductivity: A Century of Discoveries, Dreams, and Delusions

UNIVERSITÀ DEGLI STUDI DI MILANO
DOTTORATO DI RICERCA IN FISICA
ASTROFISICA E FISICA APPLICATA

Gli incontri si terranno alle **ore 15:00**
nell'**aula A** del **DIPARTIMENTO DI FISICA**
via Celoria 16 | 20133 MILANO
Tel. +39 02 50317740
http://phd.fisica.unimi.it | phd@fisica.unimi.it