



Sommerfeld Theory Colloquium

Professor Alex Kamenev

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Dynamics and critical velocity of mobile impurities in superfluids

Frictionless motion through the superfluids has fascinated scientists for nearly 80 years. After a brief discussion of its history and relevant physical concepts, I focus on a recent set of experiments studying impurities in Bose condensates of cold atoms. A particularly intriguing scenario is that of a one-dimensional host liquid, where a constant force applied to the impurity may lead to its oscillatory motion. I will discuss this phenomenon as well as the notion of the associated critical velocity (of which may be more than one).

Friday, 18 July 2014, 10:15h, Room A348/349, Theresienstr. 37/III

Prof. J. von Delft, Dr. O. Yevtushenko