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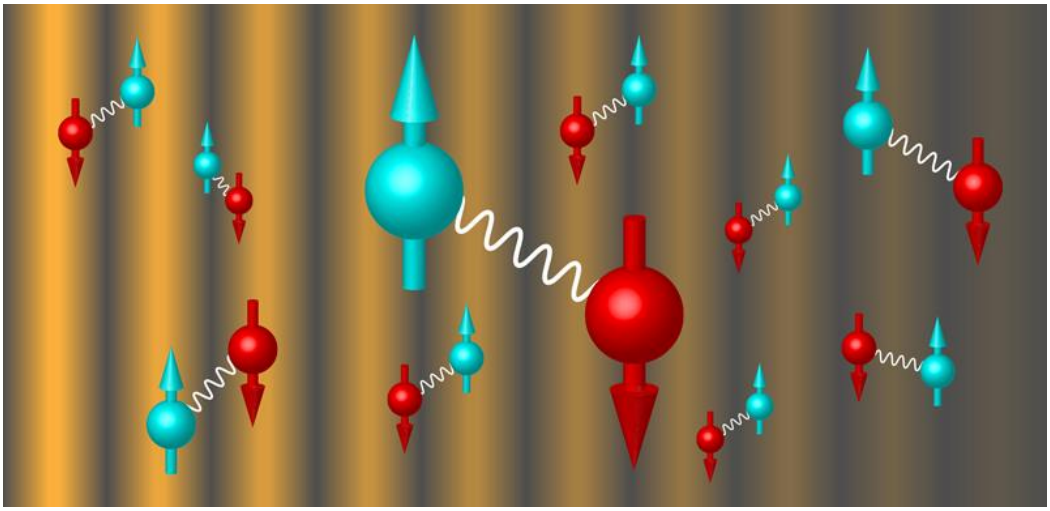
FAMP talk



Dr. Ettore Vitali
CSU Fresno

Fermionic superfluidity: from cold atoms to neutron stars

Abstract

In this presentation, I will provide an overview of fermionic superfluidity, which is a very interesting and puzzling phenomenon that occurs in some of the most mysterious systems in the universe, like unconventional superconductors and neutron stars. I will discuss the basic physical mechanism, involving a subtle interplay among quantum mechanics, quantum statistics and interatomic forces. I will also stress the importance of cold atoms as one of the most promising "laboratories" to observe Fermi superfluidity in a controlled environment. Finally, I will discuss many open exciting research opportunities in theoretical and computational physics related to superfluid fermions.

10:00 a.m. – 11:00 am Friday, May 1st Online