

COLLOQUIUM FÉDÉRATION FRIEDEL JACQUINOT

Mercredi 25 Septembre 2024 - Amphi A1 du Batiment Hbar

12h00 : Lunch box

12h30 : Séminaire de Chris Greene

Broadening our understanding of the remarkable Efimov effect

The Efimov effect, where 3 particles can have an infinite number of trimer bound states even when the two body interaction has no bound states, has intrigued researchers in both low energy nuclear physics and ultracold atomic and molecular physics for many decades dating back to the original prediction by Vitaly Efimov in 1970. Since then, this effect has been confirmed in numerous experiments. This talk will summarize some of those developments in theory and in experiment, and point out additional implications that arise when the strength of two-body interactions gets very strong and approaches the so-called unitarity limit.

Chris Greene received his undergraduate education at the University of Nebraska, followed by doctoral work at the University of Chicago under Ugo Fano, postdoctoral research with Stanford's Richard Zare and Orsay's Christian Jungen. Professor Greene has served on the faculty of Louisiana State University and the University of Colorado, before assuming his current position at Purdue University. Some of his recognitions include the Hamburg Prize in Theoretical Physics and the Davisson-Germer Prize of the American Physical Society. He is a member of the U.S. National Academy of Sciences.

