

## CICLO DE CONFERENCIAS HABLEMOS DE FÍSICA



Ciclo especialmente orientado a estudiantes

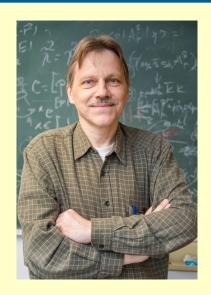
## Nuclear Physics as Precision Science

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Theoretical Nuclear Physics has entered a new era. Using the powerful machinery of chiral effective Lagrangians, the forces between two, three and four nucleons can now be calculated with unprecedented precision and with reliable uncertainties. Furthermore, Monte Carlo methods can be adopted to serve as a new and powerful approach to exactly solve nuclear structure and reaction problems. I discuss the foundations of these new methods and provide a variety of intriguing examples. Variations of the fundamental constants of Nature can also be investigated and the consequences for the element generation in the Big Bang and in stars are considered. This sheds new light on our anthropic view of the Universe.



Jueves 28 de abril de 2022, 13:30 h Aula Magna, Facultad CC. Físicas UCM