



Institut de recherche sur les lois fondamentales de l'univers

ESNT Seminar

Friday 17/05/2019, 11h-12h

Bat 703, DPhN salle de séminaires 135, CEA Saclay, Orme des Merisiers

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### **Nucleons on a Lattice: Symmetry Breaking and Restoration**

Nuclear Lattice Effective Field Theory (NLEFT) is a new method in the toolbox of theoretical nuclear physics.

After a short introduction into the foundations of NLEFT, the main part of this talk is devoted to the breaking and restoration of symmetries on a space-time lattice, especially rotational symmetry and Galilean invariance. The algorithm developed to deal with the center-of-mass problem can also be used to study nuclear thermodynamics, and first results for nuclei at finite temperatures will be shown.

*This seminar is organized within the ESNT workshop (13-17 May) about:*

*Symmetry breaking and symmetry preserving schemes.*

*Program is available on the Web site: <http://esnt.cea.fr/Phocea/Page/index.php?id=82>*



**Web Site of ESNT: <http://esnt.cea.fr>**

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