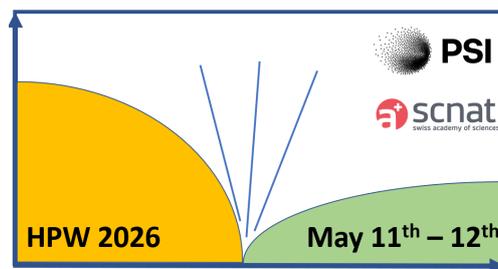


High Pressure Workshop



Contribution ID: 34

Type: Talk

The life of biosystems coping with high hydrostatic pressure conditions

Monday, 11 May 2026 13:00 (30 minutes)

Life is thought to have appeared in the depth of the sea under high hydrostatic pressure (HHP). Indeed, it is known that the deep biosphere hosts a myriad of life forms thriving under high pressure conditions. However, the evolutionary mechanisms leading to their adaptation are still not known. Here, I will discuss the impact of HHP on various biological systems covering lipidic membranes, proteins and whole cells.

Neutron scattering is a well-suited tool to disentangle various structural and dynamical elements allowing biosystems to withstand such conditions. However, it requests also suitable high pressure equipment taking into account the particularities of these experiments [1-3]. Based on research over the last years, I will present new insights into high hydrostatic pressure adaptation [4-7].

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E-mail for corresponding author: jpeters@ill.fr

Authors: PETERS, Judith (Univ. Grenoble Alpes); Prof. PETERS

Presenter: Prof. PETERS