



QuantAlps presents

Collège de France 2025 off-site courses

**Jean Dalibard**

Collège de France

## Ultracold Quantum Matter

Friday 10 January 2025 - Bergès Amphitheater

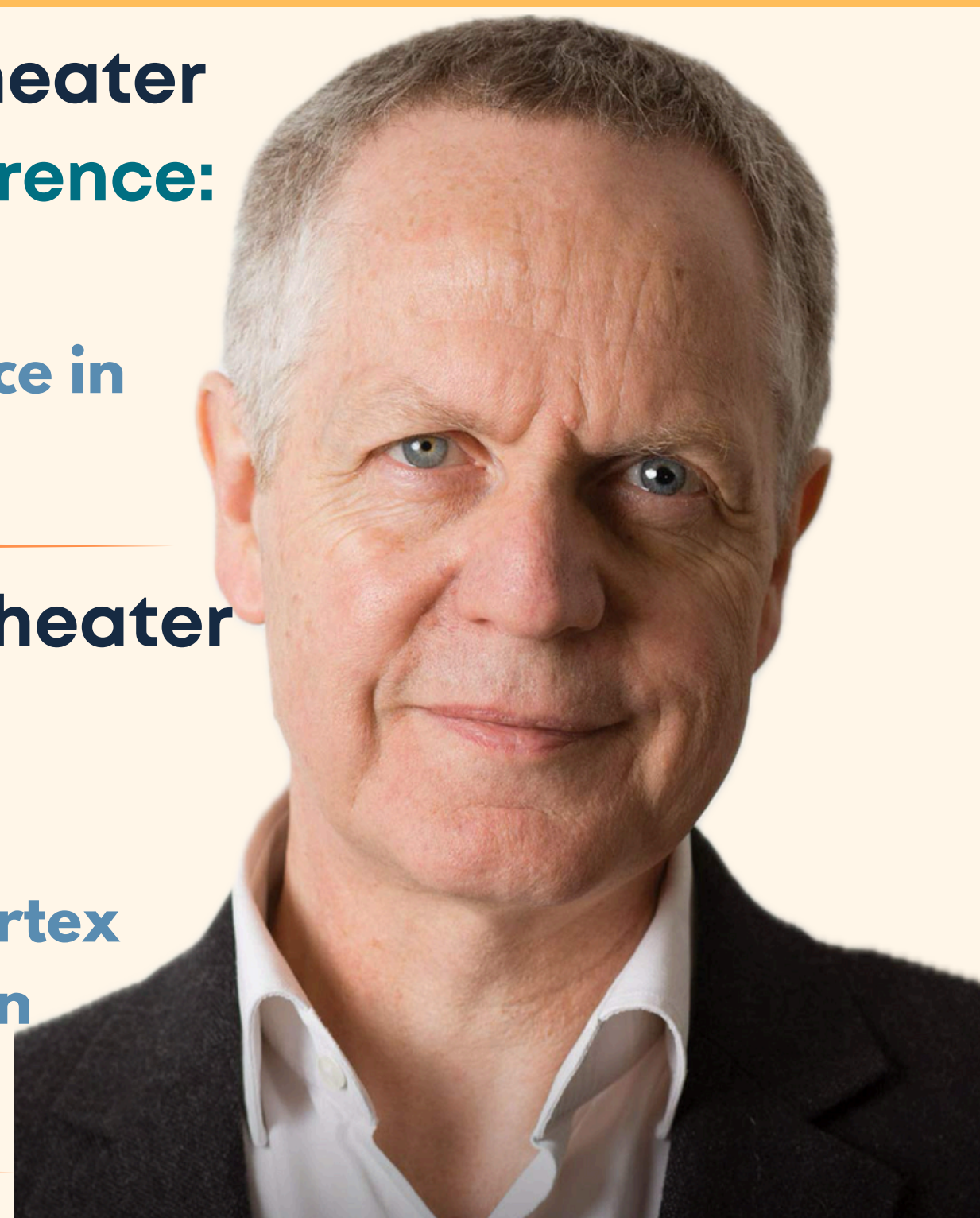
**Lecture:** Superfluidity and quantum coherence: two sides of the same coin, really?

**Seminar:** Superconductivity and phase coherence in amorphous superconductors, by Nicolas Roch

Friday 17 January 2025 - Ampère Amphitheater

**Lecture:** Solitons in quantum fluids, a surprisingly rich world

**Seminar:** Direct visualisation of the quantum vortex lattice structure, oscillations, and destabilisation in rotating  $4\text{He}$ , by Mathieu Gibert



Friday 24 January 2025 - 2A003 Amphitheater

**Lecture:** Scale invariance, a hidden symmetry explored with ultracold gases

**Seminar:** Edge mode spectroscopy in atomic fractional quantum Hall droplets - An example of conformal invariance, by Cécile Repellin

**Time of Lectures 9:30 AM - 11 AM**

**Place: GreEn-ER Building, 21 avenue des Martyrs**

Each lecture will be followed by an hour long seminar from our colleagues in Grenoble. Coffee and croissants will be offered between the lectures and the seminars.