



Canadian Association
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Contribution ID: 4463 Type: **Poster Competition (Graduate Student)** / **Compétition affiches (Étudiant(e) 2e ou 3e cycle)**

(G*) (POS-57) Towards superfluid flow experiments with periodic boundary conditions

Tuesday 28 May 2024 17:45 (2 minutes)

We propose to investigate the breakdown of superfluidity in strongly correlated Li Fermi superfluids in a new trap geometry that allows for a long coherence time: a homogenous box with one periodic boundary condition. We will achieve this by trapping on the surface of a cylinder and introducing flexible barriers to superfluid flow. We report progress toward this new trap and prospects for future experiments.

Keyword-1

Superfluid

Keyword-2

Strong correlation

Keyword-3

Turbulence

Author: FOROUHARMANESH, Forouzan

Co-authors: Prof. JAMISON, Alan (University of Waterloo); Ms BYRES, Megan (University of Waterloo); Mr HUSSEIN, Omar (University of Waterloo); Mr DEL FRANCO, Paul (University of Waterloo)

Presenter: FOROUHARMANESH, Forouzan

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