

# 798<sup>th</sup> ASRC Seminar

**Date:** 5月 18日 (火), 10:30~12:00

**Location:** Zoomによるオンラインセミナー

**Speaker:** 服部 恒一 氏

(京都大学基礎物理学研究所/  
大阪大学核物理研究センター)

**Title:** Novel transport phenomena  
in vortical and magnetic fields

Abstract:

I will discuss low-energy dynamics in vortical and magnetic fields based on hydrodynamic frameworks. The recent formulation of the relativistic hydrodynamics based on the symmetries of such systems and then solutions of the hydrodynamic equations within the linear-mode analysis will be firstly discussed. Exponentially growing modes found in the presence of a dynamical magnetic field and chirality imbalance suggest the emergence of a novel hydrodynamic instability that amplifies helical excitations. Perturbative evaluation of the transport coefficients may be covered if time allows.

<Contact>

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ZoomのURLにつきましては、  
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ご連絡ください。

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