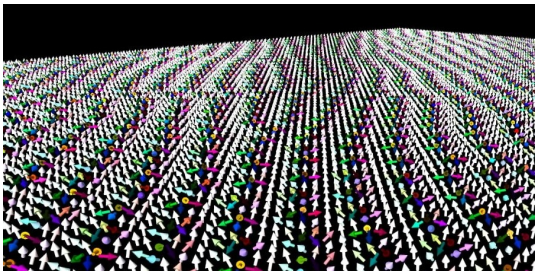

Contribution ID: **4** Type: **not specified**

Global perturbation of isolated equivariant skyrmions from the Bogomol'nyi case

Wednesday, 15 October 2025 11:30 (45 minutes)

It has been discovered that the Landau-Lifshitz energy with certain interaction terms can accurately describe the formation of stable vortex-like magnetization configurations,known as chiral magnetic skyrmions.
Accordingly, mathematical communities have been paying increasing attention to give rigorous proofs to support and deepen this understanding.
In this talk, we consider the variational problem for the Landau-Lifshitz energy under the equivariant symmetry.
After reviewing preceding studies, I will introduce the recent perturbative analysis from the Bomogol'nyi case, showing the existence of solutions and some qualitative properties. This is joint work with Slim Ibrahim (Univ. of Victoria).

Primary author: Prof. SHIMIZU, Ikkei (Kyoto University)

Presenter: Prof. SHIMIZU, Ikkei (Kyoto University)