

## Advances in variational methods and applications Special Session A26

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In the last decade, there has been a remarkable surge of interest within the scientific community, spanning physicists, engineers, biomedical researchers, and materials scientists, in the fields of new materials, micro-devices, artificial intelligence, machine learning, and stochastic modeling. These advancements have opened up a plethora of potential applications, driving the need for innovative mathematical techniques, methodologies, and the creation of novel function spaces to establish robust mathematical models. This requires a significant mathematical undertaking.

Our proposed minisymposium is dedicated to the variational formulation of these applications, aiming to provide well-founded and dependable mathematical descriptions. Our primary objective is to bridge the gap between these real-world applications and the realm of mathematics, uniting a community of experts in the field of Calculus of Variations.

This session is scheduled on July 23-24.