

## FMfI2023 Program

Name	Yoshikazu Terada
Affiliation	Graduate School of Engineering Science, Osaka University / Center for Advanced Integrated Intelligence Research, RIKEN
Title	<b>A statistical theory of clustering</b>
Abstract	<p>With recent advances in computer and measurement technologies, large and complex datasets have become common in various application fields. The importance of unsupervised learning has been recognized. Clustering, one of the most important tasks in unsupervised learning, aims to discover hidden groups for a given set of data points. However, the theoretical properties of clustering methods have received less attention. In this talk, we will discuss the minimal requirements that clustering methods should satisfy from a theoretical standpoint. We will explain the theoretical properties of several clustering methods and present our recent works related to this topic.</p>