## Recent developments on the Wadge degrees of Borel functions

Takayuki Kihara Nagoya University, Japan

**Abstract:** In this talk, I will present a survey of recent developments in the theory of the Wadge degrees of Borel functions. This talk will include the following topics:

- Kihara-Montalbán's complete description of the Wadge degrees of BQO-valued Borel functions, and its axiomatic paraphrase by Selivanov.
- Pequignot's notion of Wadge reducibility on admissibly represented spaces, and Selivanov's extension of Kihara-Montalbán's theorem to admissibly represented spaces.
- Motto Ros's notion of  $\Delta_{\alpha}^{0}$ -reducibility, and Kihara-Selivanov's extension of Kihara-Montalbán's theorem to the  $\Delta_{\alpha}^{0}$ -reducibility degrees.
- Kihara-Sasaki's flowchart definition of Kihara-Montalbán's  $\Sigma$ -classes (Selivanov's fine hierarchy) and generalization of Louveau's theorem to  $\Sigma$ -classes.