# Non-compactness phenomena on critical problems and related topics

Date : 2023 November 18 (Sat.) 9:55 – November 19 (Sun.) 17:35

Venue : E408, Faculty of Science Building, Osaka Metropolitan University

Program

November 18 (Sat.)

9:55 – 10:00  Opening

10:00 – 11:00  Cristina Tarsi (University of Milan)
        Moser type inequalities on unbounded domains and applications to PDEs
                                                                (part I)

11:10 – 12:10  Federica Sani (University of Modena and Reggio Emilia)
        On the existence of maximizers for second order Adams type inequalities on balls

        Lunch Time

14:00 – 15:00  Norisuke Ioku (Tohoku University)
        Non-uniqueness for a critical heat equation in two dimensions with singular data

15:20 – 16:20  Hiroaki Kikuchi (Tsuda University)
        Positive solutions to stationary double power nonlinear Schrödinger equations

16:20 –        discussion

November 19 (Sun.)

10:00 – 11:00 Federica Sani (University of Modena and Reggio Emilia)
Blow-up and global solutions for a parabolic problem with Trudinger-Moser nonlinearity

11:10 – 12:10 Cristina Tarsi (University of Milan)
Moser type inequalities on unbounded domains and applications to PDEs
(part II)

Lunch Time

14:00 – 15:00 Takeshi Suguro (Kumamoto University)
Deficit estimates for the logarithmic Sobolev inequality for a generalized entropy and its application

15:10 – 16:10 Daisuke Naimen (Muroran Institute of Technology)
Concentration analysis of semilinear elliptic equations with exponential growth in a disc

16:30 – 17:30 Shinji Adachi (Shizuoka University)
On the existence of ground state solutions to some elliptic equations with Sobolev critical growth

17:30 – 17:35 Closing