



浙江师范大学
ZHEJIANG NORMAL UNIVERSITY



Stein–Weiss inequalities, Choquard problems, and beyond

The Speaker: Vicentiu D. Radulescu

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Beijing time: Thursday, Oct. 21, 2021, 2:00–3: 00 pm

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Abstract: I shall report on some recent results in collaboration with Youpei Zhang and Xianhua Tang. I will first discuss a new Stein–Weiss inequality with lack of symmetry and variable exponents. The defect of symmetry of the potential is quantified by considering the gap between the minimum and the maximum of the variable exponent. This abstract anisotropic inequality is illustrated with the existence of stationary waves for a class of nonlocal problems with Choquard nonlinearity and anisotropic Stein–Weiss potential. I conclude this talk with the thorough analysis of solutions for a related class of Choquard problems and I will be mainly interested in the asymptotic decay of solutions in the case of low or high perturbations.

Prof. Vicentiu Radulescu is a Full Professor at the university of Craiova (Romania) and also a Professorial Fellow at the Institute of Mathematics of the Romanian Academy in Bucharest. He is an internationally renowned expert in the field of nonlinear analysis. His tutor is H Brezis, an academician of the French Academy of Sciences. Professor Radulescu has won the SIMION stoilow award of the Romanian Academy of Sciences. He has served as Advances in Nonlinear Analysis, Nonlinear Analysis, Journal of Mathematical Analysis and Applications and so on. The editorial board of applications and other high-level mathematics journals has published more than 350 papers in high-level mathematics journals.

Organizer: Minbo Yang, Department of Mathematics, Zhejiang Normal University.