African-European Early-Career Network for Mathematical Analysis and Related Fields

Meeting 13.02.26 17:00-19:00 CET

Program

Math Talk | 45 *min*
On radial self-similar solutions for a generalized Chipot-Weissler nonlinear equation.
By Inssaf Raiss, Abdelmalek Essaadi University, Tetouan, Marocco

Abstract: We study a nonlinear parabolic equation with p-Laplacian-type diffusion, generalizing the Chipot-Weissler equation. By seeking radial self-similar solutions, the problem is reduced to the study of a nonlinear ordinary differential equation. Under appropriate assumptions on the exponents, we establish the existence and uniqueness of global solutions for the associated radial problem. We prove the existence of strictly positive solutions and analyze their asymptotic behavior near infinity. The particular case corresponding to the vanishing of certain nonlinear terms is also considered, with special attention given to the strict positivity and asymptotic behavior of the solutions. The results obtained are then applied to the original parabolic equation, allowing for the characterization of radial self-similar solutions of the model.

Personal Interest Talk | 15 min
When Industry Becomes Culture.
By Jona Stahlschmidt, University of Leipzig, Germany

Abstract: This short talk looks at old industrial buildings in the city of Leipzig and what happened to them over the last decades. Many former factories and warehouses, once central to everyday working life, have found new roles today as cultural spaces, studios, cafés, or places to live. By taking a closer look at the district of Plagwitz as an example, the talk highlights how industrial heritage can shape the character of a neighborhood long after the machines have disappeared.