

Functional inequalities and PDEs Special Session A9

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This session deals with the most recent results in PDEs, functional inequalities and their applications to PDEs. We will mainly focus on existence, regularity, qualitative properties of solutions to PDEs, and optimal functional inequalities. In this framework, inequalities play a crucial role in establishing uniform bounds, global existence results and large-time behavior, decay rates, and existence/uniqueness of blow-up solutions to various classes of differential equations. Furthermore, functional inequalities are also intrinsically fundamental in many sub-fields of analysis. The invited speakers are actively involved in this research area with distinguished contributions. They will discuss their latest achievements and future developments. The session aims to bring together experts in different fields to encourage fruitful discussions, develop new ideas, and promote knowledge exchange between participants.