



# ***SEMINAR ANNOUNCEMENT***

## **“Filamentation of femtosecond laser in air plasma”**

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The filamentation of femtosecond laser pulses in air plasma is well-grounded research topic due to its versatile applications in remote sensing of atmospheric pollution, pulse compression, electric charge triggering and guiding, lighting control, and remote Terahertz pulse generation. In this topic, a stable filament formation in air plasma is the preeminent objective, while controlling the properties of the formed filament over a long propagation-distance is the challenge. In this talk, I will explain the filamentation process and underline the fundamental linear and nonlinear dynamics associated with the filamentation, in other words, I will illustrate the role of particular dynamics in the filament formation and show how the interplay among these dynamics can control the properties of the formed filament. I will also review the status and future prospects of topic, and then I will present our recent results.

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