Fizički odsjek, PMF, Sveučilište u Zagrebu Bijenička cesta 32

## Seminar Fizičkog odsjeka

Vrijeme (s.t.)

Mjesto

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predavaonica F102

## Neutrino oscillations in core-collapse supernovae

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Core-collapse supernova explosions signify the death of massive stars by releasing nearly all of their gravitational binding in neutrinos. These neutrinos play essential roles in various physical processes in supernovae, such as the revival of the supernova shock and supernova nucleosynthesis. Also, the supernova neutrino signals serves as an unique tool to probe the properties of the dense core of supernovae. To really understand the effect of neutrinos in core-collapse supernovae, it is important to model the neutrino oscillations that happen in this unique environment. In this talk, I will discuss the status and potential impact of neutrino oscillations in core-collapse supernovae and the problems and challenges of modelling this complicated phenomenon.

> Voditelji seminara FO Damir Pajić i Ivica Smolić