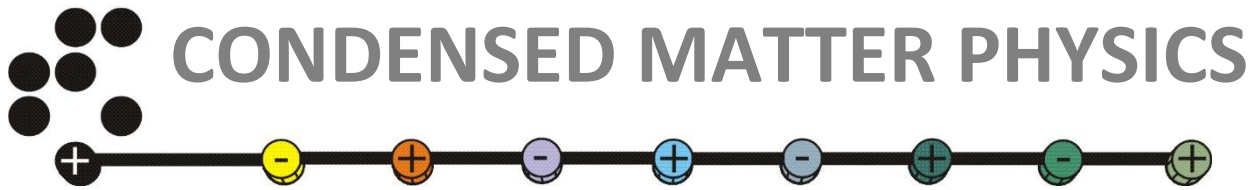


# F-5 SEMINAR



*Tuesday, November 28, 2023  
at 09:30 AM*

*in the seminar room of physics (room 106)  
Condensed Matter Physics, Jožef Stefan Institute*

***Nenad Lazarević, PhD***

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## **Lattice, spin, and charge excitations in Fe(Se:S)**

We use Raman scattering as a function of temperature and polarization to probe charge and spin dynamics in FeSe. In agreement with numerical simulations of a spin-1 Heisenberg model, several peaks in all Raman active symmetries can be assigned to spin excitations. The dominating feature is a peak in B<sub>1g</sub> symmetry around 500 cm<sup>-1</sup> which shows distinct temperature dependence. In the second step, all types of excitations including phonons, spins, and charges are analysed in detail for Fe(Se:S). Finally, the evolution of lattice excitations as a function of tensile uniaxial strain is analysed.

***You are cordially invited to attend.***