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## XPCS in soft matter and biomolecular condensates at Cateretê beamline/Sirius

Tuesday 27 August 2024 11:30 (20 minutes)

X-ray Photon Correlation Spectroscopy (XPCS) is a coherent X-ray scattering technique enabling to probe dynamics based on observations of fluctuations in the intensity of coherent X-ray speckles. XPCS has contributed to address important questions in soft matter and biomolecular condensates such as phase separation in protein solutions, colloidal microscopic organization during gelation, structure evolution of thermo-reversible gels, relaxation in polymer electrolytes, among others. The unique capabilities of XPCS to probe dynamics and structural evolution in non-equilibrium systems can answer fundamental questions about liquid-liquid phase separation of protein solution. XPCS can provide unique insights into biomolecular dynamics and condensate fluidity over the mesoscale particle size range. In this presentation I will show some recent results of biomolecular condensates and soft matter dynamics probed by XPCS at Cateretê Beamline, the coherent X-ray scattering beamline at the Brazilian Synchrotron Light National Laboratory, Sirius.

## I plan to submit also conference proceedings

Yes

Primary author: RIBEIRO PASSOS, Aline (Brazilian Synchrotron Light National Laboratory)

**Co-authors:** Dr POLO, Carla (Brazilian Synchrotron Light National Laboratory); Dr MENEAU, Florian (Brazilian Synchrotron Light National Laboratory); Mr ZERBA, João Paulo (Brazilian Synchrotron Light National Laboratory); Mr ARAUJO KALILE, Tiago (Brazilian Synchrotron Light National Laboratory)

**Presenter:** RIBEIRO PASSOS, Aline (Brazilian Synchrotron Light National Laboratory)

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