

## Invited Lecture

**From local minimum to local minimum, when is a young career going to lock-in?****A. Minelli***Neutron Scattering Division, Oak Ridge National Laboratory, Oak Ridge TN 37831, USA**minellia@ornl.gov*

Navigating the early stages of one's career often resembles a journey through a landscape of local minima, each promising but potentially trapping. From a “unripe” scientist perspective, what are the critical junctures and key events that determine when a trajectory becomes locked into a particular path? How are the individual aspirations, external opportunities, and structural constraints intertwined in shaping a specific career?

I am an instrument scientist in CORELLI, the diffuse scattering spectrometer at the Spallation Neutron Source in Oak Ridge, a national laboratory in the USA. My work is focused on the dynamical instabilities arising in the charge density wave phase transition. I started my journey in Padova, doing a Bachelor and Master degree in Material Science. Then, I obtained a second master in Material Physics at the Sorbonne in Paris, France. I moved to France, in Grenoble, because I was fascinated by the X-ray facilities, as synchrotron, and I obtained a PhD in Physics doing diffuse and inelastic x-ray scattering with Alexei Bosak at the ESRF in ID28. From there, I moved back to the University world, working as a Postdoctoral researcher in the group of Andrew Goodwin in Oxford. Finally, I moved to the National Laboratory in Oak Ridge where I currently work.

*Arianna Minelli's work is supported by the DOE Office of Science.*