

Jets and the medium & Jets in the experiment

14 July 2026

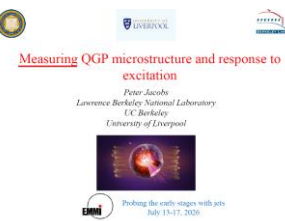
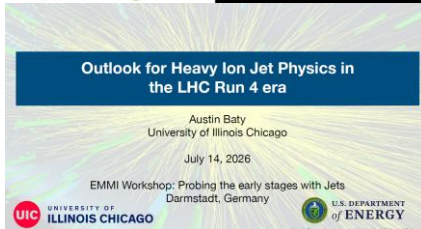
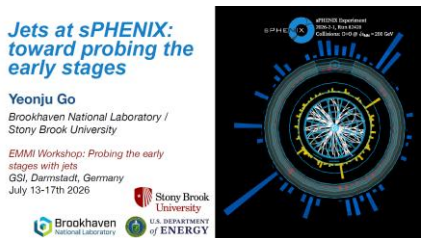
**EMMI Workshop “Probing the early stages with jets”
July 13-17, 2026, GSI, Darmstadt**

09:00	Covariant Jet Momentum Broadening in QCD Effective Kinetic Theory	Isabella Danhoni	
	KBW Lecture Hall, GSI	09:00 - 09:30	
	Jet quenching of heavy quarks in flowing QCD matter	Matvey Kuzmin	
	KBW Lecture Hall, GSI	09:30 - 10:00	
10:00	Probing coherence effects with jet formation time	Chiara Le Roux	
	KBW Lecture Hall, GSI	10:00 - 10:30	
	Coffe break		
	KBW Lecture Hall, GSI	10:30 - 11:00	
11:00	What can we learn from sPHENIX about the early stages	Yeonju Go	
	KBW Lecture Hall, GSI	11:00 - 11:30	
	Outlook for heavy ion jet physics in the LHC Run 4 era	Austin Baty	
	KBW Lecture Hall, GSI	11:30 - 12:00	
12:00	Measuring QGP microstructure and response to excitation	Peter Jacobs	
	KBW Lecture Hall, GSI	12:00 - 12:30	

I. Jets and the medium:

Do we really understand how jets propagate through the medium?

- ❑ How should jet propagation be matched consistently across Glasma, kinetic, and hydrodynamic stages?
- ❑ Can q -hat, energy loss and momentum broadening be defined unambiguously in a flowing, anisotropic, non-equilibrium medium?
- ❑ Can jet formation time serve as a reliable clock for probing the earliest stages of the collision?



II. Jets in the Experiment:

- ❑ Which measurements could decisively distinguish early-time jet energy loss from interactions occurring during the later QGP evolution?
- ❑ To what extent do background subtraction, trigger selection, and reconstruction biases distort the jet-medium physics we aim to extract?
- ❑ What discoveries involving jets could become possible in the LHC Run 4 era?

