



**UNIVERSITÄT  
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## **Photon and jet parton polarization as a measure of QGP anisotropy**

Heavy-ion collisions produce a new state of matter known as the quark-gluon plasma (QGP). The QGP is far from equilibrium and has a large momentum anisotropy at early times. In this talk, I discuss how this early momentum anisotropy affects jets and photons. I show that anisotropic momentum broadening of jet partons leads to net polarization in emitted gluons and that this polarization is constant across all energy scales in the jet. I furthermore discuss how photons emitted from the medium have net polarization, giving a direct signal of the QGP's pressure anisotropy.

**Monday, 19 December 2022**

**16:15 in D6-135**

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