

## **Seminar Fakulteta za fiziku**

Vrijeme: petak, 2. lipnja 2023. u 11 sati

Mjesto: O-152, Fakultet za fiziku, Sveučilišni kampus, Radmile Matejčić 2

Jezik: engleski

### **Observables from modified dispersion relations**

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#### **Abstract**

Modified dispersion relations are one way to effectively describe aspects of quantum gravity, in particular the propagation of particles on quantum spacetime. In this talk I discuss how one can understand dispersion relations on curved spacetime as Hamilton functions. I will present how modifications of the general relativistic dispersion relation influence observables like the time of arrival of photons, the shadow of black holes, gravitational lensing and the Shapiro delay.