

New quantum technologies and gravity

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As has been emphasized in the talk of Hansjoerg Dittus, the second quantum revolution enables new technologies which are not accessible through classical physics. These technologies are characterized by the engineering and manipulating of quantum states. In this talk the interface between these new technologies and the gravitational interaction is highlighted by considering a few topics: (i) a metrological triangle for gravity, (ii) two gravitational constants, (iii) Hong-Ou-Mandel interferometry in gravitational fields, and (iv) quantum imaging of the gravitational field.

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