

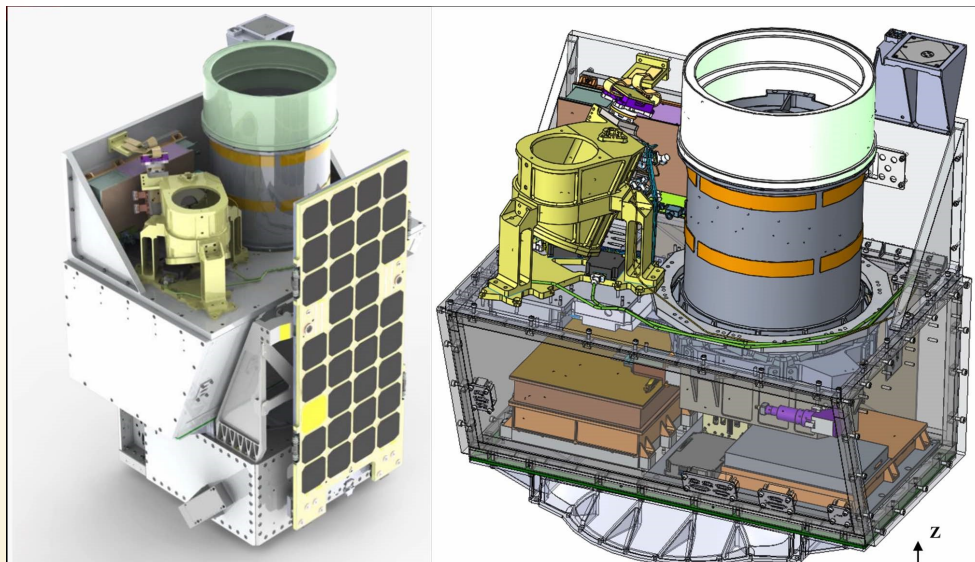


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### QEYSSat – the Canadian quantum satellite mission

The Quantum Internet will readily transfer quantum bits between users near and far and over multiple different channels, and could be used for secure communications, distributed quantum computing and metrological applications. Satellite to ground quantum links are a crucial technology, as they will allow large distances and reaching locations with little infrastructure. I will discuss recent advances in the generation and distribution of free-space quantum information using novel techniques including time-bin and reference frame independent protocols. I will also give an overview of the upcoming Canadian quantum communication satellite mission QEYSSAT.



**Tuesday, 14.03.2023, at 16:30 h, HS C (Technik)**

Innsbruck Physics Colloquium,  
Organisation: K. Erath-Dulitz, H.-C. Nägerl, T. Schrabback