

Towards Compact, Robust and Highly Stable Optical Frequency References for Space Applications

While in terrestrial applications optical frequency references are already being established in many fields, the situation is different for space applications. Here, reliability, size, weight, and power budgets are key considerations in addition to the performance. We will present the ongoing development of two different types of optical frequency references towards space compatibility. This includes on the one hand an optical cavity setup, and on the other a broad outline of the evolution of the iodine technology towards the COMPASSO project. Finally, a brief overview of a hybrid lock will complete this presentation.

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