

## **Chip-scale frequency comb generators**

Recent advances in photonic integration are creating new prospects for the realization of comb generators on chip. This tutorial will cover the physical principles behind some of the most promising platforms operating in the near infrared: modelocked lasers, electro-optic comb generators, gain-switched diodes and Kerr frequency combs. After the basic principles are covered, we'll discuss the challenges and tradeoffs, highlight the most suitable applications for each platform, and overview recent advances in heterogeneous integration techniques.



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