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Abstract for an Invited Paper
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Quantum computing over the rainbow¹

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In this talk, I will present how the quantum version of the optical frequency comb can be used as a universal quantum computing platform. This quantum optical frequency comb is not emitted by a laser (as is usually the case for the classical OFC) but by an optical parametric oscillator whose two-photon emission provides the basic entanglement mechanism for quantum computing. Also, in this implementation, qubits are replaced with quantum optical fields, a.k.a. qumodes. I will review progress by research groups around the world, which includes current record qumode scalability over all qubit platforms.

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