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## Visualizing Entanglement in multi-Qubit Systems

Thursday 6 July 2023 11:50 (20 minutes)

Visualizing multi-qubit systems is challenging due to their high complexity. We present the dimensional circle notation (DCN) as an extension of the so-called circle notation that is used in introductory quantum computing courses to reduce mathematical hurdles. By doing so, we reveal entanglement properties of such systems and make measurements and unitary operations in multi-qubit systems more intuitive. DCN can therefore be used in education and research alike. In this workshop, we discuss the possibilities and limitations of DCN as compared to other visualizations and show how to use our publicly available DCN python/web-tool.

### How would you like to present your contribution?

Hybrid from my own country (early in the conference day, best for Asia, Australia ...)

### Target education level (primary)

University education

### Target education level (secondary, optional)

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**Session Classification:** Hybrid session - early

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