



## Colloquium

# Magic pictures about mirror symmetry between Langlands dual Higgs bundles

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Host: Timothy Browning

A traditional puzzle, going back to centuries, is a "magic picture". The task is to find a figure, for example a person or animal, hidden in some otherwise normal looking picture. Some versions depict objects which can be looked at different angles to perceive as different pictures. We will show some examples of such magic pictures in a mathematical context. Such a mathematical magic picture serves as a dictionary between two otherwise unrelated mathematical theories. Examples will include Langlands duality and mirror symmetry. At the end I will mention two such successful magic pictures in my work both related to mirror symmetry for Langlands dual Higgs bundles. The first one is our topological mirror symmetry conjecture with Thaddeus from 2002 proved recently. The second is a very recent conjecture with Hitchin promising a new visualisation of the representation theory of compact Lie groups.

**Friday, January 29, 2021 03:00pm - 04:00pm**

Online



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