

# Morita theory for quantales

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## **Abstract.**

In this talk, we give a characterization of those quantaloids (categories enriched in the symmetric monoidal closed category of sup-lattices) that are equivalent to modular categories over quantales. Based on this characterization, necessary and sufficient conditions are derived for two quantales to be Morita-equivalent, i. e. have equivalent module categories. As an application, it is shown that the category of internal sup-lattices in a Grothendieck topos is equivalent to the module category over a suitable chosen ordinary quantale.

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