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## [616] Investigation of Metal-Insulator transition in NaOsO3 using Resonant X-Ray Diffraction

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In 5-d transition metal oxides, spin-orbit coupling becomes sizable and its interplay with e.g. the Coulomb interaction has led to the observation of exciting novel ground states. We report here on NaOsO3, which has been proposed to be the first realization of a Slater insulator i.e. a system in which a metal-insulator transition is driven only by antiferromagnetic correlation. We employed Resonant X-ray Diffraction to elucidate the nature of the metal-insulator transition. By a careful study of forbidden reflections, we can exclude the presence of a structural crystallographic change at the phase transition. In addition, we observe an anomaly below the Neel temperature that is indicative of the Slater scenario.

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