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FM and AFM ordering within a MAX phase bulk

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Neutron diffraction is used to establish room temperature magnetic ordering within a laminar, MAX phase material, for the first time. This finding is the first "building block" within our search for 2D magnetic materials. A coexistence between FM and antiferromagnetic (AFM) ordering is found at 1.5 K, in agreement with previous DFT calculations.

Primary author: RIVIN, Oleg (Nuclear Research Center - Negev (ISRAEL))

Co-authors: Dr GEORGII, Robert (MLZ); Dr CASPI, El'ad (Nuclear Research Center - Negev and Drexel University); Dr HOSER, Andreas (HZB); Dr PESACH, Asaf (NRCN); Mr TAO, Quanzheng (Linkopig University); Prof. BARSOUM, Michel (Drexel University); Prof. ROSEN, Johanna (Linkopig University)

Presenter: RIVIN, Oleg (Nuclear Research Center - Negev (ISRAEL))

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