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**Magnetic Bloch Oscillations in 1D ferromagnets** OLAV SYLJUÅSEN, SERGEY SHINKEVICH, University of Oslo — Domain-walls in certain 1D ferromagnets can oscillate when exposed to a static magnetic field. Such magnetic Bloch oscillations have however not been observed experimentally to date. We have calculated neutron scattering signatures of magnetic Bloch oscillations for the material  $\text{CoCl}_2 \cdot 2\text{H}_2\text{O}$ , and investigated numerically the possibility of using a laser to generate such oscillations at low temperatures. Our results are positive, and may be used to assist the experimental search for magnetic Bloch oscillations.

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