

Nuclear magnetic resonance (NMR) experiments in high magnetic fields

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Nuclear magnetic resonance (NMR) experiments in the highest magnetic fields (both static and pulsed) have been developed and improved at dedicated large-scale research facilities (EMFL in the EU and NHMFL in the USA) over the last few decades. They are becoming increasingly available for user experiments. We will give an overview of the current developments, possibilities, and peculiarities of NMR experiments in pulsed magnetic fields [1]. Furthermore, through examples of a few low-dimensional spin systems, we will present opportunities to address scientific questions that can be uniquely addressed using NMR in high magnetic fields [2, 3, 4]. We also promote a special issue of the Journal *Solid State Nuclear Magnetic Resonance*, “*Ultra-high Field Solid-State NMR at 1 GHz and Beyond*” [5], containing a fresh review on ultra-high field NMR applied to Quantum Spin Systems [6].

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[3] S. Allenspach *et al.*, *Phys. Rev. Res.* **3**, 023177 (2021)

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[6] R. Stern *et al.*, *Solid State Nucl. Magn. Reson.*, 143 (2026)