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## FIMPs @ direct detection

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FIMP dark matter is produced via the freeze-in mechanism that generally implies tiny coupling between the DM and the standard model particles, making DM direct detection and collider searches almost hopeless. This is not the case for a DM at low reheating temperatures, where direct detection plays a fundamental role in constraining the parameter space. We show the viability of a scalar and a spin  $3/2$  model and discuss the details of the production mechanism and future experiments that can test it.

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