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# The DarkSide-20k Experiment in 10 Minutes

*Monday, 20 July 2020 13:45 (15 minutes)*

DarkSide-20k is a next-generation dark matter detector at the Laboratori Nazionali del Gran Sasso in Italy. With a projected sensitivity of $7.4 \times 10^{-48}$ cm$^2$ for 1 TeV/$c^2$ WIMPs for a 10 year run, DarkSide-20k will be the most sensitive dark matter experiment ever built. I will highlight the innovative design features of the DarkSide-20k experiment, including custom cryogenic silicon photomultipliers and a novel sealed acrylic TPC. I will also discuss strategies for mitigating several important sources of intrinsic background.

## Summary

## Fermilab report number

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