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PICO Dark Matter Searches (20' + 5')

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PICO employs the unique sensitivity of fluorine based refrigerants such as C_3F_8 to axial-vector couplings with WIMPs. Currently the PICO collaboration is operating two bubble chambers filled with C_3F_8 at SNOLAB. A small bubble chamber, PICO 2L, is used to study effects of contamination of the superheated active liquid. The PICO 60, a large bubble chamber with 60kg active mass is currently in its second run aiming to ultimately reach a cross section sensitivity of $2 \times 10^{-41} \text{ cm}^2$ for interactions between WIMPs and protons. This paper will present the latest results of these two detectors and describe the future plans for PICO.

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