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## Initial conditions for non-thermal dark matter production

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I will discuss the preferred initial conditions that scalar field fluctuations during cosmic inflation generically place for post-inflationary, non-thermal dark matter (DM) production. I will show that accumulation of quantum fluctuations during inflation can account for all or part of DM. I will also discuss the DM isocurvature perturbations that are unavoidably generated in such scenarios and the circumstances under which they are not problematic for viability of non-thermal DM models. I will also discuss implications of DM isocurvature for structure formation, showing that interesting consequences can be expected.

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