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**Multifluid models for cyclic cosmology.** (English. Russian original) Zbl 1179.83074

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**Summary:** Inspired by the Landau two-fluid model of superfluidity, we consider a similar multifluid description for cosmology where two normal fluids occur for matter and radiation, respectively. For cyclic cosmology, two dark energy superfluid components turn out to be insufficient but three superfluids can lead to a sensible five-fluid model which in a certain limit becomes indistinguishable from a brane-world cyclic model proposed earlier. Distinguishing more general five-fluid models from brane-world models for cyclic cosmology could be feasible with more accurate observational data.

**MSC:**

**83F05** Cosmology

**83C55** Macroscopic interaction of the gravitational field with matter (hydrodynamics, etc.)

Cited in 1 Document

**Full Text:** [DOI](#)

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