Deposition Pattern of a Pinned Circular Evaporating Coffee Drop
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Chicago — When a coffee drop dries on a solid surface, a ring-like, finite-width stain
remains. We establish a simple mathematical model to study the density distribution
of the stain across its width. The asymptotic form of the distribution does not
depend on the specific evaporation profile, i.e., diffusion-controlled evaporation vs.
uniform evaporation. We also compare our findings with the simulation results based
on truncated one-dimensional transport process.

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