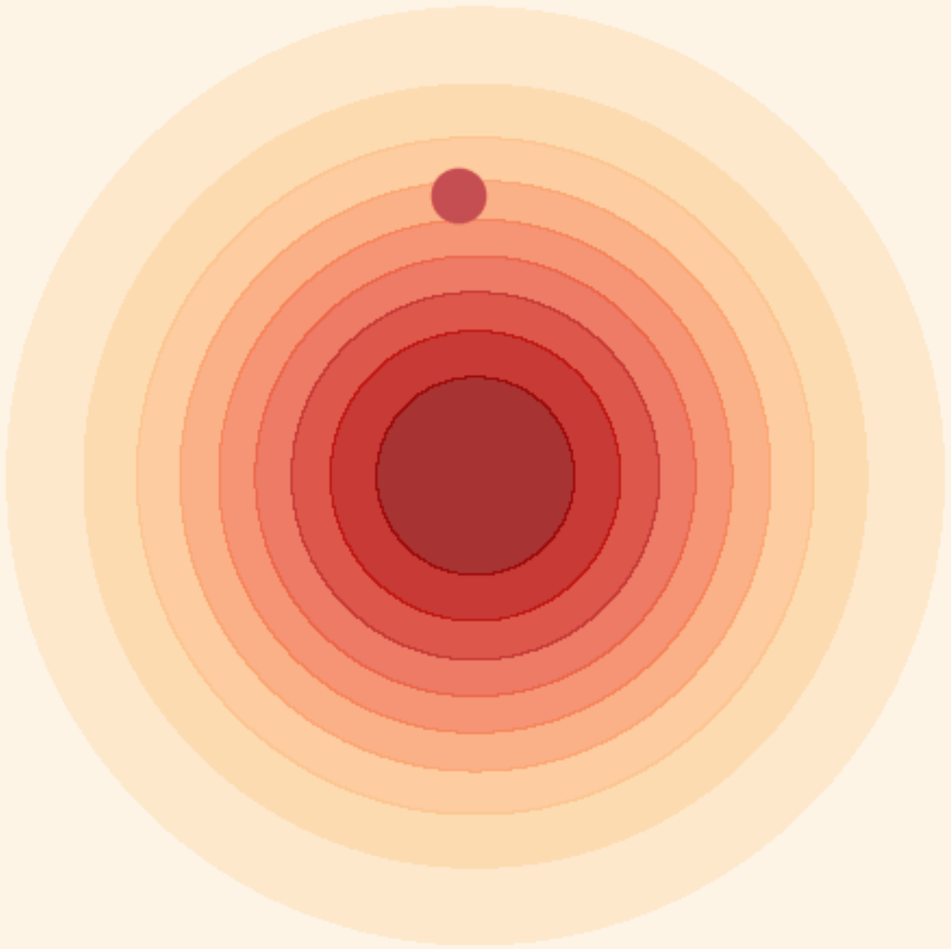
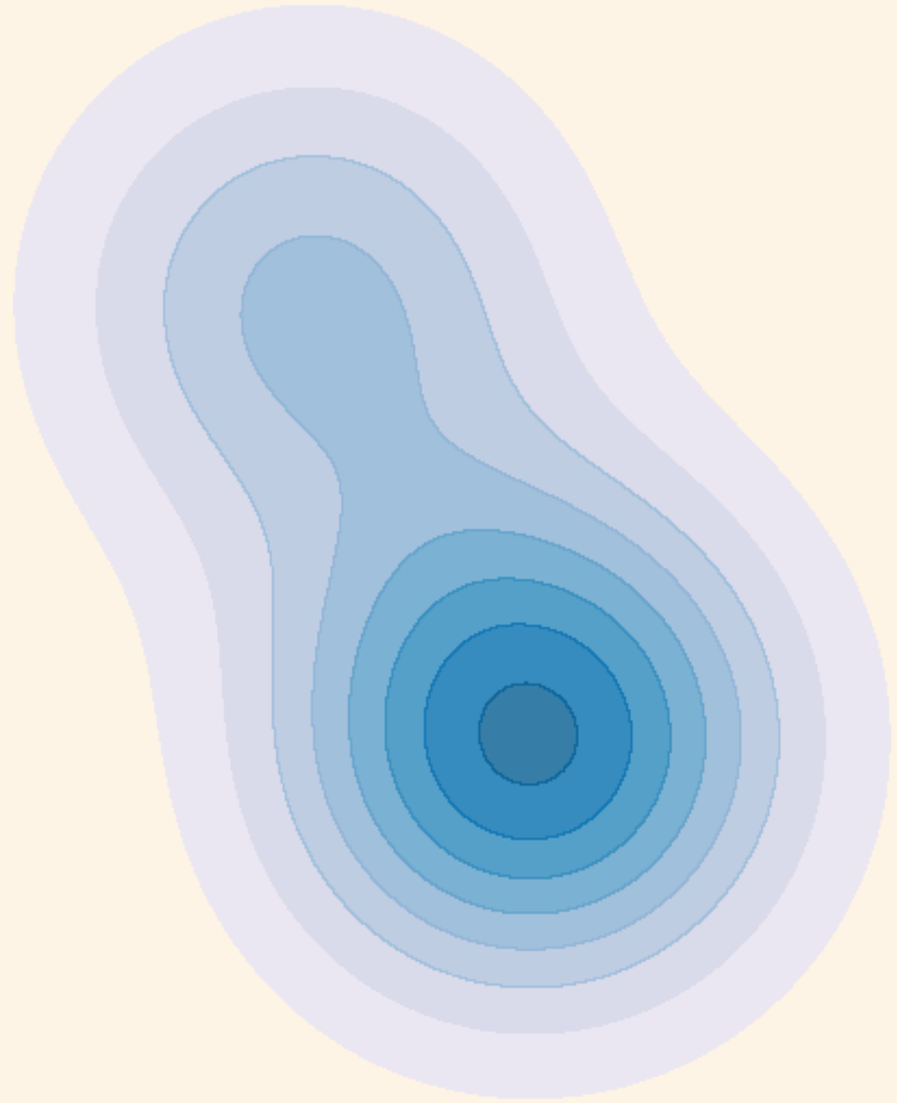
DTM: 2-steps

FM





DTM vs. FM

Theorem 1: (informal) As the number of steps increases, $T \to \infty$, DTM converges to Euler step FM. Given a state $X_t = x_t$,

$$X_{t+k} \approx x_t + \frac{k}{T}\mathbb{E}\left[X_T - X_0 \,|\, X_t = x_t\right], \quad \text{as } k/T \to 0,\ k \to \infty.$$

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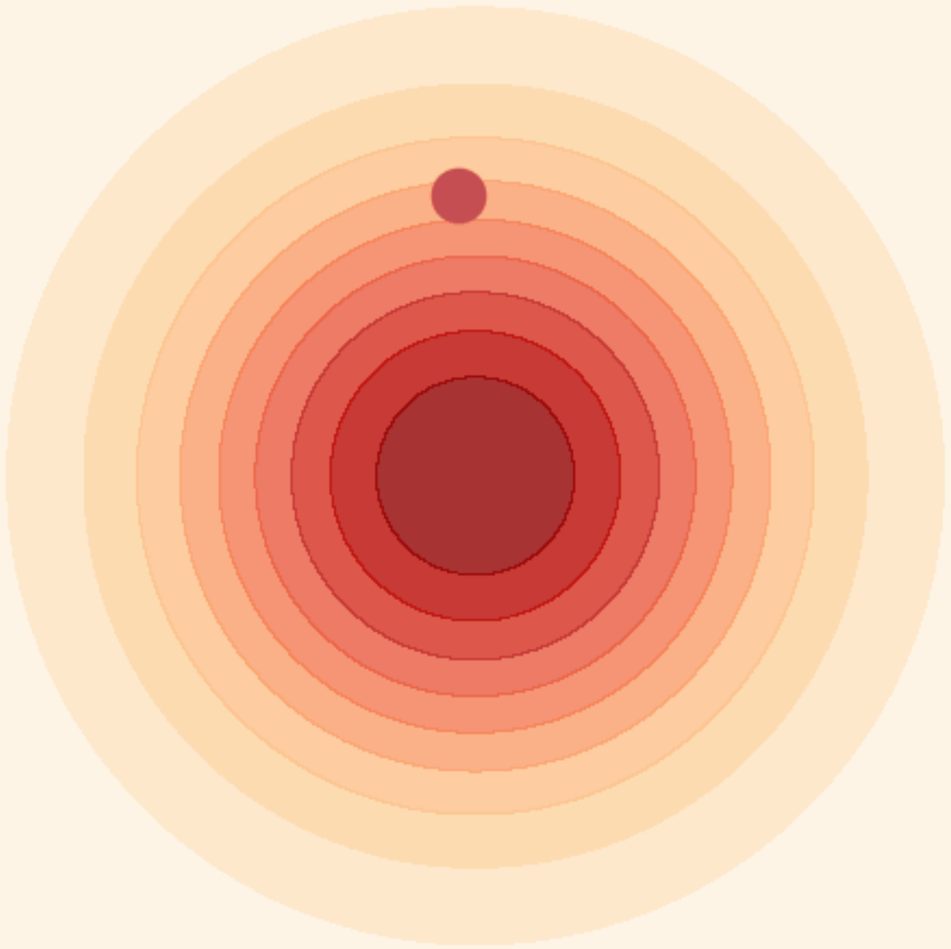
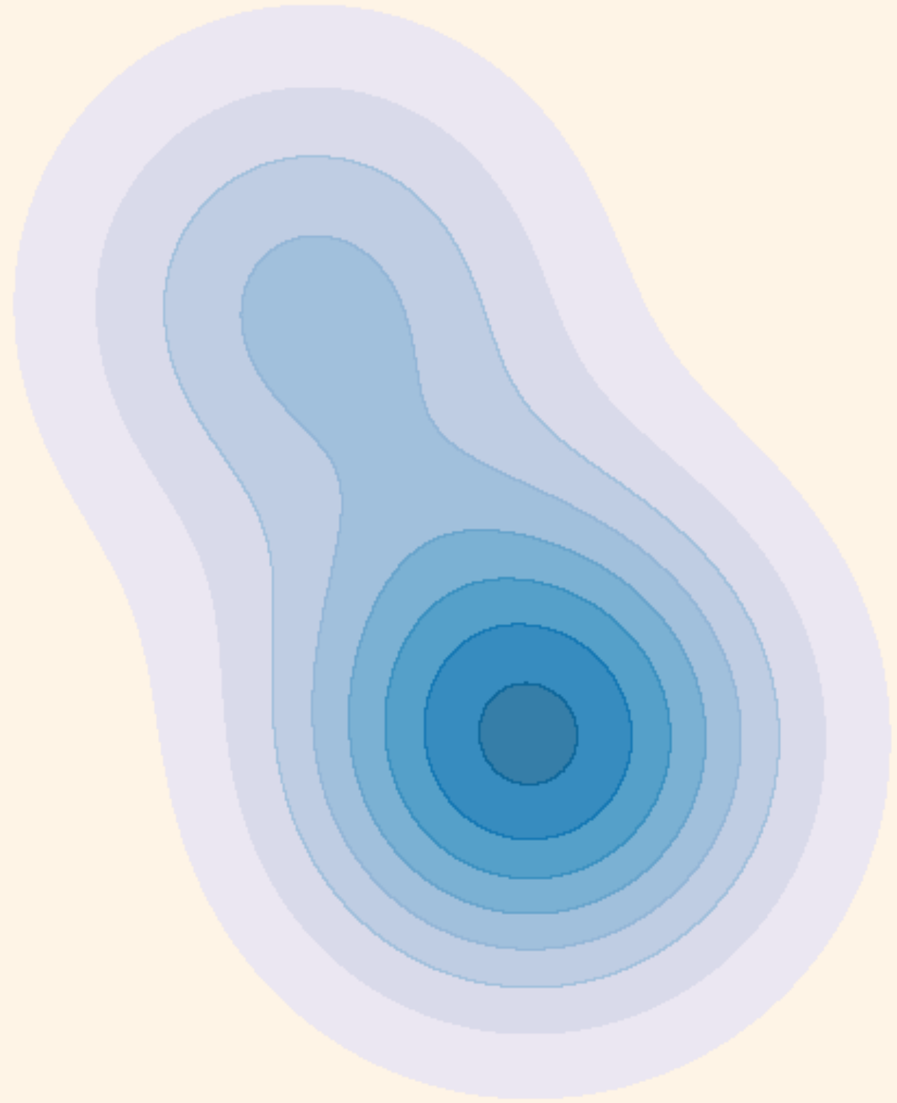
FM





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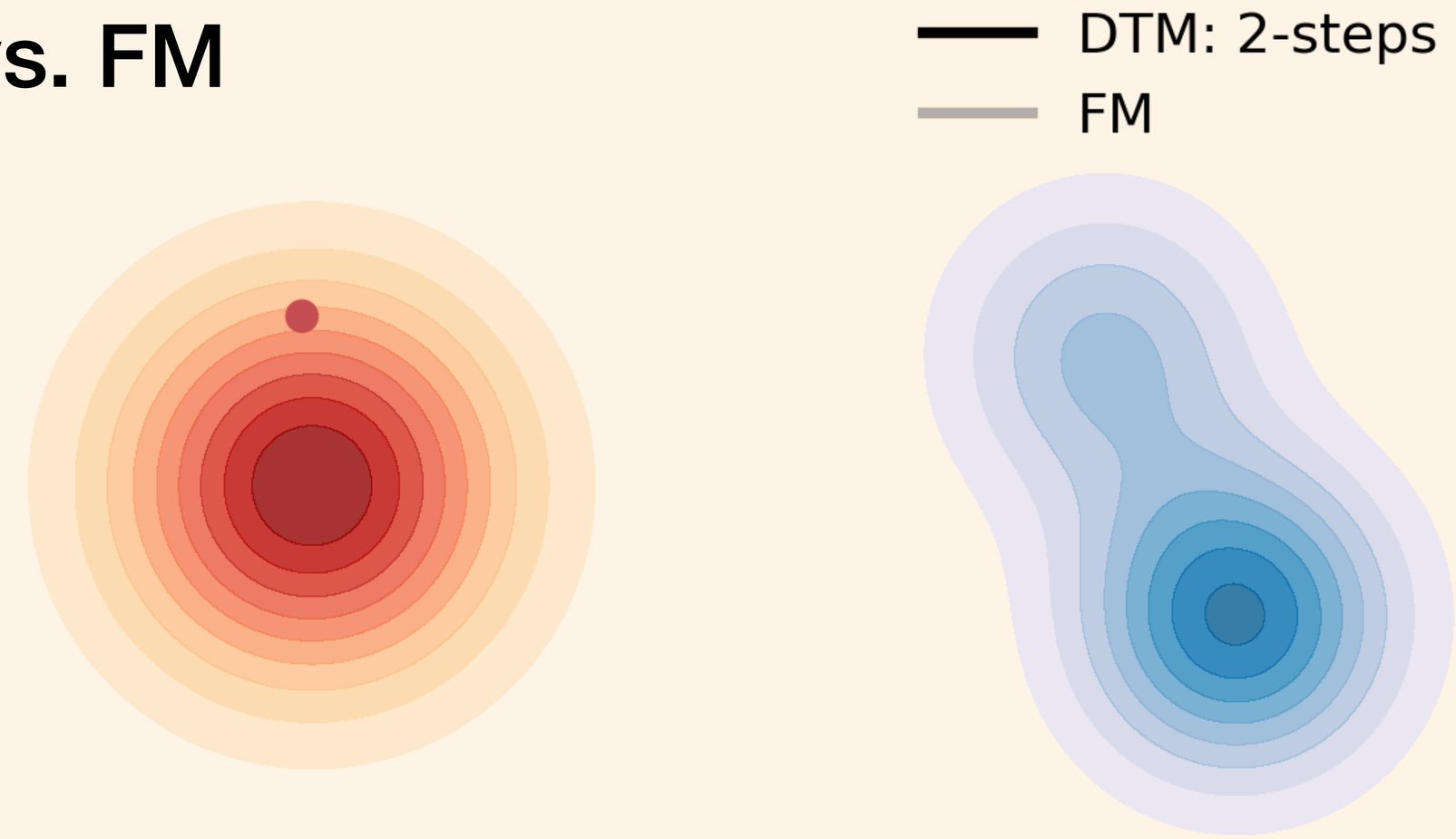

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TM Variants

Can we come up additional interesting design choices?