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„The filtered circle."

Abstract:
I will describe a conceptual (universal property–based) perspective on the relationship between Hochschild homology and derived de Rham cohomology in the setting of commutative rings. A key construction is a highly structured filtered enhancement of the $\mathbb{Z}$-linearized circle. Time permitting, I will discuss how this story generalizes to variants of Hochschild homology associated to formal groups, and how seeking to construct the corresponding "filtered circles" in the setting of commutative ring spectra leads to a tantalizing connection with the story of formal groups in stable homotopy theory.