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Kyle M. Ormsby* (ormsby@umich.edu), Department of Mathematics, 2074 East Hall, 530 Church Street, Ann Arbor, MI 48109-1043. *Some remarks on 2-completed motivic homotopy theory and the motivic J -homomorphism.*

I will talk about 2-complete \mathbb{P}^1 -stable motivic homotopy theory over an algebraically closed field of characteristic 0 and a motivic analogue of the Adams-Novikov spectral sequence. I will also discuss Voevodsky's stratification of motivic Eilenberg-MacLane spaces with associated graded pieces given by certain reduced symmetric products of \mathbb{P}^1 . As an application, I will present interesting new phenomena like elements of the stable stem mapping to 0 in etale homotopy. I will also discuss the image of a motivic analogue of the complex J -homomorphism (with domain algebraic K -theory). This project is in part joint with Igor Kriz and Po Hu, and owes much to discussions with Dan Isaksen, whose joint work with D. Dugger and O. Roendigs it complements to a certain extent. (Received July 16, 2008)