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**Winfried Bruns.** *Cohen-Macaulayness of initial ideals of normal toric ideals.* Preliminary report.

Hochster's theorem shows that every normal toric ideal is Cohen-Macaulay. More than fifteen years ago Sturmfels asked whether a normal toric ideal has always a Cohen-Macaulay initial ideal. We will report progress on the road to answering this question. We will show that initial ideals that are associated to what we call normal liftings are Cohen-Macaulay, and we will provide an effective test whether such a normal lifting exists. We will also provide examples where normal toric ideals without such liftings still can have Cohen-Macaulay initial ideals. (Received February 23, 2016)