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Zachary Hamaker and **Oliver Pechenik***, Department of Mathematics, University of Michigan, 530 Church St, Ann Arbor, MI 48103, and **Anna Weigandt**. *Gröbner geometry of Schubert polynomials through ice*. Preliminary report.

Knutson and Miller (2005) showed that the multidegree of a matrix Schubert variety X_w is the corresponding Schubert polynomial \mathfrak{S}_w . Moreover, after Gröbner degeneration with respect to any antidiagonal term order, the resulting irreducible components are naturally labeled by the pipe dreams for w . In later work with Yong (2009), they used diagonal term orders to obtain alternative combinatorics for certain X_w . We present further results in this direction, with connections to a neglected Schubert polynomial formula of Lascoux (2002) in terms of the square-ice model (recently rediscovered by Lam, Lee, and Shimozono in the guise of “bumpless pipe dreams”). (Received September 17, 2019)