1153-05-426 **Gabriel Frieden*** (gabriel.frieden@lacim.ca), LaCIM, UQAM, CP 8888, Succ. Centre-Ville, Montréal, QC H3C 3P8, Canada. *Affine geometric crystals.* Preliminary report.

A geometric crystal is an algebraic variety equipped with a family of rational $\mathbb{C}^*$-actions which tropicalize (when expressed in a suitable chart) to piecewise-linear formulas for the Kashiwara operators on the crystal bases of a family of representations. In this talk, I will present an affine type A geometric crystal structure on the Grassmannian $\mathrm{Gr}_{n-r,n}$ which lifts the crystal bases of the Kirillov–Reshetikhin (KR) modules associated to rectangular partitions with r rows (when restricted to $\mathfrak{sl}_n$, these modules remain irreducible, and are isomorphic to $V(s\varpi_r)$, $s > 0$). One feature of the construction is a precise connection between the cyclic shift map on $\mathrm{Gr}_{n-r,n}$ and the combinatorial promotion map. Then I will comment about work in progress on lifting KR modules associated to multiples of minuscule weights in other affine types. (Received September 02, 2019)