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Zachary Hamaker, Rebecca Patrias* (patri080@umn.edu), **Oliver Pechenik** and **Nathan Williams**. *Doppelgängers: Bijections of Plane Partitions*.

For Y of type B_n , H_3 , or $I_2(m)$, there exists a minuscule poset that is a "doppelgänger" of the positive root poset of Y —the two posets have the same number of linear extensions and the same number of plane partitions of each height k . Furthermore, for each such Y , there is a second minuscule poset whose upper half is the positive root poset of Y . Remarkably, these two facts are related.

In this talk, we synthesize a remark of R. Proctor, M. Haiman's rectification bijection, and minuscule K -theoretic Schubert calculus techniques of H. Thomas and A. Yong to give a uniform framework for combinatorial proofs of these poset coincidences. As a special case, we provide the first bijective proof of a 1983 theorem of R. Proctor—that plane partitions of height k in a rectangle are equinumerous with plane partitions of height k in a trapezoid. (Received July 14, 2016)