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Joseph Wells* (joseph.wells@asu.edu), Arizona State University, WXL Room 216, 901 S. Palm Walk, Tempe, AZ 85287-1804. *Hybrid subgroups of complex hyperbolic lattices*. Preliminary report.

In the 1980's Gromov and Piatetski-Shapiro presented a technique called "hybridization" wherein one starts with two arithmetic hyperbolic lattices and uses them to produce new hyperbolic lattices (and notably, nonarithmetic lattices). It has been asked whether there exists an analogous hybridization technique for complex hyperbolic lattices. In this talk I'll present a potential candidate hybridization technique and some recent results for both arithmetic and nonarithmetic lattices in $PU(2,1)$. Some of this is joint work with Julien Paupert. (Received September 25, 2018)