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**Sven Hermann, Anders Jensen, Michael Joswig** and **Bernd Sturmfels\***, Department of Mathematics, UC Berkeley, Berkeley, CA 94720. *How to draw a tropical plane.*

The tropical Grassmannian parameterizes tropicalizations of linear spaces, while the Dressian parameterizes all planes in tropical projective  $(n - 1)$ -space. We study these parameter spaces and we compute them explicitly for  $n \leq 7$ . Planes are identified with matroid subdivisions and with arrangements of trees. These representations are used to draw pictures. (Received January 19, 2009)