Jozef H. Przytycki* (przytyck@gwu.edu), 10005 Broad Street, Bethesda, MD 20814. Gram determinants of planar states and Lagrangian tangles.

We describe the work with Qi Chen on a solution of Rodica Simion problem of computing the Gram determinants of the type B Temperley-Lieb algebras. We sketch the work with Qiaoqi Zhu on Gram determinants of planar surfaces and speculate on the form of Gram determinants of Lagrangian tangles and their categorification. (Received September 16, 2008)