1116-35-2163 Christopher Swierczewski* (cswiercz@gmail.com), University of Washington, Dept. of Applied Mathematics, Lewis Hall #202, Box 353925, Seattle, WA 98195-3925. Computing Solutions to the Kadomtsev-Petviashvili Equation.

Krichever showed that the Kadomtsev-Petviashvili equation admits a family of quasiperiodic so-called "finite-genus" solutions which are dense in the space of all periodic solutions. Such a solution can be determined from a Riemann surface and a divisor on the surface. In this talk we will demonstrate a symbolic-numerical approach to obtaining these solutions using the Python software package "abelfunctions". (Received September 21, 2015)