Meeting: 1004, Bowling Green, Kentucky, SS 7A, Special Session on Semigroups of Operators and Applications

1004-34-89 **Yuri Latushkin*** (`yuri@math.missouri.edu`), Department of Mathematics, University of Missouri, Columbia, MO 65211. *Dichotomy Theorem, Fredholm determinants, and the Evans function.*

We study Fredholm properties of the operator -d/dt+A(t) with unbounded operators A(t) and their relations to the dichotomies of the corresponding differential equation and the "spectral flow=index"-type theorems. In the finite dimensional case, we discuss connections of the Evans function and Fredholm determinants of the corresponding sandwiched resolvent. (Received January 18, 2005)