ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO A GUEST LECTURE

Ergodicity in nonautonomous linear ordinary differential equations

Mihály Pituk | University of Pannonia, Hungary

Chaired by Christian Pötzsche | Department of Mathematics

Friday, 9 August 2019 | 10:00–11:00

N.2.01

ABSTRACT

The weak and strong ergodic properties of nonautonomous linear ordinary differential equations will be considered. It will be shown that if the coefficient matrix function is bounded, essentially nonnegative and uniformly irreducible, then the normalized positive solutions are asymptotically equivalent to the Perron vectors of the strongly positive transition matrix at infinity (weak ergodicity). If, in addition, the coefficient matrix function is uniformly continuous, then the convergence of the normalized positive solutions to the same strongly positive limiting vector (strong ergodicity) is equivalent to the convergence of the Perron vectors of the coefficient matrices.

We hope to see you there!