Organizátoři tradičního Semináře o diferenciálních rovnicích si dovolují vás pozvat na přednášku, kterou přednese významný a světově uznávaný odborník v této oblasti

prof. Russel A. Johnson (University of Florence),

Rotation and oscillation for linear Hamiltonian systems,

v pondělí, 22.2.2016, 13:00, v zasedací místnosti ÚMS, 2. patro.

Abstract: For a classical Sturm-Liouville problem, the concept of oscillation is taken to mean, in general terms, "the number of zeros" of a solution in a given interval, while rotation means "the change of the polar angle in the phase plane" of that solution, in that interval. Both these concepts can be generalized to higher-dimensional linear Hamiltonian systems. We will discuss rotation and specifically the rotation number for such systems. We will further discuss various relations existing between the rotation number; the appropriate oscillation concept; the presence of exponential dichotomy; and the existence of principal solutions. Much of what we will say is the result of joint work with Roberta Fabbri (University of Florence), and with Sylvia Novo, Carmen Nunez, and Rafael Obaya (University of Valladolid).

Introduction of Russel Johnson: Professor Johnson is widely regarded as a world leader and pioneer in the dynamics of nonautonomous differential equations and skew-product flows. He has made widespread contributions, and his papers on topological dynamics and ergodic theory to differential equations are especially noteworthy. His mathematical works include contributions to the spectral theory of linear skew-product flows, recurrent Floquet theory, almost automorphic dynamics, spectral properties of almost periodic Schrödinger operators, and nonautonomous control theory. These areas are now widely studied and are among the most active areas of modern dynamics.

Přednáška potrvá i s případnou diskusí přibližně hodinu. Za organizátory Semináře o diferenciálních rovnicích

Zuzana Došlá a Roman Šimon Hilscher