Speaker: **Wong, Peter**
Title: *Coincidence theory for infra-solvmanifolds*
Authors: Daciberg Goncalves and Peter Wong
Affiliations: Bates College

Abstract: Let $f, g : X \to Y$ be maps between two closed oriented n-manifolds. When Y is an infra-solvmanifold, necessary and sufficient conditions are given for the equality between the Nielsen number $N(f, g)$ and the Reidemeister number $R(f, g)$. The proof makes use of certain residual property of virtually polycyclic groups and the following factorization result: let π be a finitely generated torsion-free virtually polycyclic group. For any finitely generated group G, there exists a finitely generated torsion-free virtually polycyclic group $\bar{G}$ and an epimorphism $\epsilon : G \to \bar{G}$ such that for any homomorphism $\varphi : G \to \pi$, there exists $\bar{\varphi} : \bar{G} \to \pi$ such that $\varphi = \bar{\varphi} \circ \epsilon$.