Introduction to the Anomalous Hall Effect in ferromagnetic compounds

Abstract: The purpose of this seminar is to present the responsible mechanisms for the Anomalous Hall effect (AHE) in conventional and unconventional ferromagnetic compounds. We will explain the role of the impurities and the spin-orbit coupling for most of the theories proposed during the last century and review briefly the effect of the frustration on the AHE in unconventional (frustrated) ferromagnets.