Contact-less measurements of Shubnikov-de Haas oscillations below Néel temperature in single crystals SmAgSb$_2$
M. D. VANNETTE, R. PROZOROV, S. L. BUD’KO, P. C. CANFIELD, B. N. HARMON, Ames Laboratory and Department of Physics and Astronomy, Iowa State University, Ames, Iowa 50011 — Oscillations of a skin depth with magnetic field were measured in single crystals SmAgSb$_2$ by using radio-frequency resonant technique. Comparison with directly measured de Haas – van Alphen and Shubnikov – de Haas oscillations revealed additional details in the frequency spectra, probably due to high sensitivity of the measurements $\Delta \rho_{min} \approx 20 \, \text{p}\Omega \cdot \text{cm}$. The temperature evolution of the frequency spectra was obtained. The correlation of the observed oscillations with calculated Fermi surface and possible influence of antiferromagnetic ordering are discussed.