

Investigation of the Beta-vibrational band in ^{154}Sm by electron spectroscopy

J. Smallcombe

Triumf, Vancouver, Canada

^{154}Sm has long been presented as a typical beta-vibrator, but the definition has recently been called into question. E0 transition strengths are highly sensitive to beta-vibrator behavior, thus measuring E0 transitions provides a key test for this description of the nucleus. Using the SAGE internal conversion spectrometer at Jyvaskyla, a coulomb excitation study of ^{154}Sm was undertaken. An overview of the experiment, the analysis techniques used and upper limit E0 strength measurement of J->J transitions will be presented.