

SX Phoenicis Stars in the Globular Cluster M71

Young-Beom Jeon¹, Myung Gyoon Lee², Seung-Lee Kim¹, Ho Lee³

¹*Korea Astronomy Observatory*

²*Astronomy Program, SEES, Seoul National University*

³*Dep. of Earth Science Education, Korea National University of Education*

Through time-series CCD photometry of the globular cluster M71, we have detected two SX Phoenicis stars, including a new discovered star (labeled SXP2) and a previously known (labeled SXP1). They show double-radial modes, which are fundamental and first overtone modes for SXP1, and fundamental, second overtone and third overtone modes for SXP2. Considering its distance modulus derived from several P-L relations SXP2 seems a non-member of M71, but it is not clearly confirmed the membership, because the mode identification of SXP2 has large uncertainties.