

Cepheids and large scale spectroscopic surveys.

B. Lemasle¹, G. Bono², M. Bergemann³, P. François⁴, N. Matsunaga⁵, L. Inno²,
and R. da Silva²

¹*Anton Pannekoek Institute for Astronomy, University of Amsterdam, The Netherlands*

²*Università di Roma Tor Vergata, Italy*

³*Max Planck Institute for Astrophysics, Heidelberg, Germany*

⁴*GEPI, Observatoire de Paris, France*

⁵*Department of Astronomy, The University of Tokyo, Japan*

Abstract

Cepheids are excellent tracers of the Milky Way (present-day) abundance gradients and therefore are an important input for the chemodynamical evolutionary models of our Galaxy. After briefly presenting the latest results in this field, I will discuss the impact of the next-generation survey spectrographs and explore the observing strategies in the context of large scale surveys.

As Cepheids are the first ladder of the extragalactic distance scale, I will also briefly comment on the impact of large surveys on the current research on the Cepheid period-luminosity relations.