A New Web Service for STARLIGHT

M. Trevisan¹, W. A. dos Santos², R. R. de Carvalho¹, R. Cid Fernandes³, F. La Barbera⁴, I. Ferreras⁵

¹Division of Astrophysics, DAS – Instituto Nacional de Pesquisas Espaciais (INPE) – São José dos Campos, SP – Brazil marina@das.inpe.br

²Computing and Applied Mathematics Laboratory, LAC, Instituto Nacional de Pesquisas Espaciais (INPE) – São José dos Campos, SP – Brazil

³Departamento de Física, CFM, Universidade Federal de Santa Catarina – Florianópolis, SC – Brazil

⁴INAF, Osservatorio Astronomico di Capodimonte – Napoli – Italy

⁵MSSL, University College London – Holmbury St. Mary – Dorking – UK

Abstract. The study of stellar populations in galaxies is a powerful tool to understand how these systems were formed and evolved. The properties of the stellar content of galaxies can be derived using a spectral fitting code named STARLIGHT. This code determines the age and the chemical composition of stellar populations within galaxies, and also reconstructs the detailed star formation history of individual objects. In this project, we are implementing the STARLIGHT code in a VO-like environment, making stellar population analysis more efficient and reliable since executions can be distributed and may suit to different clients. The service can be consumed by either: (1) online client, mostly astronomers or (2) machine clients in a particular e-Science workflow.