Commission G3 "Stellar Evolution" Triennial Report 2021-2024

Despite being a large commission, there is significant overlap with other commissions with a narrower scope and hence more focussed and intense activity However, the topic of stellar evolution remains at the heart of understanding the baryonic evolution and appearance of the Universe, and there are fundamental, long-standing gaps in our understanding of stellar structure and stellar atmospheres across a wide range of stellar types and evolutionary phases. It is therefore that a request is made to continue Commission G3 into the next triennium.

The past couple of years have been challenging for many people, personally as well as in their work place as recovery from the COVID-19 lockdowns has exacerbated inequities. With an already small organising committee and one unresponsive member, it has been difficult to succeed in our ambition to engage the commission's membership. Efforts to liaise with other commissions did not lead to cross discipline coordination either. The idea of schools was not picked up by the membership, though it is encouraging to see that this is now being considered within Commission G2 ("Massive Stars", a very active community). However, everything has now been set up to start a series of seminars, to be launched soon.

The Working Group on "Red Giants and Supergiants" operates under Commission G3. It had been active but suffered similar setbacks in the years following its organisation of a successful online conference in 2021. It has expressed a strong desire to continue into the next triennium, though, with a clearer focus on the theoretical understanding of convection and other hydro-dynamical processes that underpin many of the most important aspects of luminous cool stars. Another conference is being contemplated as well as a White Paper, and the unfortunately broken AGB Newsletter is being revived.

Both organising committees, of Commission G3 and the above working group, will see substantial change in membership and leadership, increasing their capacity to deliver. As outgoing President of G3 I wish both well and thank those who have contributed to their past work.

Jacco van Loon President of Commission G3