Abstract ID : **40**

LIFE Target Database

Content

The LIFE initiative (LIFE = Large Interferometer For Exoplanets) has the goal to develop the science and technology for a future space mission designed to characterize terrestrial exoplanet atmospheres and search for life outside the solar system. After an official kick-off in late 2018 and community building efforts in 2020, LIFE is currently in a first study phase.
One of the working groups of the LIFE Science Team is defining and designing the stellar target database. The goal of the LIFE database is to collect relevant data about the stellar systems to optimize target prioritization and, ultimately, target selection for the mission. Aside from offering scientists easy ways to access the data, the database should be able to output a list of selected stellar targets together with defined key parameters. This list will depend on the available data in the database as well as the observation scenario that is chosen as input. Currently the database is at the end of the design phase and will soon go over to the implementation phase. The database will primarily encompass stars within 20 parsec of the Sun together a large set of stellar parameters and measurements, as well as important information about planets and circumstellar disks orbiting the stars. The set of stellar parameters is currently being finalized. A key feature of the database is that it should automatically update its content via VO compatible sources (e.g. SIMBAD, VizieR,...) and be VO compatible itself. In this talk I will summarize the content and logical structure of the database.

Preferred talk time

Any of the following UTC timeslots work for me: 25.05.21 13:30-16:00 26.05.21 06:00-07:00 27.05.21 06:00-07:00 and 13:30-16:00 28.05.21 06:00-07:00 and 13:30-16:00 Preferred timeslot would be 27. or 28. in the morning.

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Track Classification: Applications; Data Access Layer; Data Model; Semantics; Knowledge Discovery in Databases; Solar System

Comments:

I was encouraged by the IVOA member Eleonora Alei to offer you a contribution for the meeting. I would like to introduce the LIFE mission and its target database working group, tell you what the current status of the database is and ask for help in applying the IVOA standards to it. Since IVOA has much more experience in databases than I have I hope to get in contact with people willing to help me finish the database design phase and take on the implementation phase. For the IVOA I assume it is helpful to get insight into a new project working with (or at least trying to) their standards and getting feedback on the challenges in doing so. I am not sure if I selected the right Tracks.

Submitted by **MENTI, Franziska** on **Saturday 15 May 2021**