Instrumentation Section Report – 20 June 2016

Activities of the Instrumentation Section largely revolve around communication, outreach, guidance and education, plus the important aspect of encouraging people in the pursuit of their personal instrumentation projects. There is no drive to formally induct members into the Section. Rather, the approach has been to address ASSA members' ad-hoc needs for information on a case by case basis.

In support of the Society's general communication efforts, which equally support the instrumentation Section's goals, the following activities are ongoing:

- Moderate the ASSA FaceBook page
- Moderate the Yahoo! Group mail lists
- Moderate the Telescope Making SA FaceBook page

The Section directly supports the needs of both ASSA members and the general public regarding selection, construction, purchase, maintenance and use of instrumentation. This is mostly done via the Amateur Telescope Making (ATM) class, the Telescope Making SA FaceBook page, e-mail correspondence, telephonic discussion, and ScopeX.

The distinctly South African "Telescope Making SA" Facebook group has attracted members from around the world. This international involvement produces an energetic flow of ideas, information, technical assistance and encouragement. Some of the (at times unusual) approaches to instrumentation developed locally have, after being highlighted in this medium, been favorably received and copied abroad. Prospective members are vetted prior to admitting them to the group and appropriate behaviour is gently but firmly enforced.

The ATM class has been continuously active since mid-1991, so this year celebrates its 25th year of operation. It attracts a steady stream of newcomers to the art, with a good success rate of people finishing their first instruments. In addition, after completion of their first telescope, a fair number of participants stay on or return in order to tackle more advanced projects. Members come and go according to their needs and available time, work at their own pace on individual projects, and sometimes return after a long hiatus dictated by personal circumstances. The class is run informally in a flexible manner to accommodate the vagaries of members' lives. Consequently there is no way to ascertain the number of people or projects engaged in at any one time. Membership of ASSA, whilst encouraged, is not a prerequisite for participation in the ATM class.

ScopeX, which grew out of the ATM class, is currently ramping up for the 15th annual event. In addition to the primary goals of general astronomy outreach and publicizing the Society, it provides a platform for the telescope making community to exhibit their work and thereby encourage newcomers to engage in this fascinating hobby. Having a plethora of instruments at one place enables visitors and members alike to see, touch, compare and even use a variety of instruments - both commercial and amateur-built or modified. This sparks discussion of ideas, approaches and relative merits, enabling people to make informed choices. ScopeX reports are published separately.

At the last tally, 261 individuals have signed the ATM class manifesto since it was introduced in 2005. The Telescope Making SA FaceBook page currently has 526 members. Notable projects currently underway include a 24" mirror, a Yolo telescope and a complete telescope control system developed from scratch. To date (apart from ScopeX), no formal communal projects have been initiated within the Section. However, the 24" and the telescope control projects are likely to evolve into collaborative ventures. The Director is also putting together a portable telescope and camera control system for astrophotography in the field, largely employing off-the-shelf components in order to ease construction and integration such that others could possibly replicate it for their own purposes.