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Golden Era of Cataclysmic Variables and Related Objects: concluding remarks

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Abstract. The cataclysmic variables represent important part of modern astrophysics, as demonstrated by the conference Golden Era of Cataclysmic Variables and Related Objects held on Mondello (Palermo) in September 2011.

Key words. Stars – Variable Stars – Cataclysmic Variables

1. Introduction

Cataclysmic Variables (CVs) represents in many aspects true astrophysical laboratory where various physical processes and models may be observed, investigated, and tested. They even may play a significat role in generation of galactic X-ray background, a consequence of suprisingly large fraction of CVs in hard X-ray sources detected by ESA satellite INTEGRAL. Despite of large theroretical and experimental progress in last years there are still numerous important questions to be answered. Even for well known and studied objects such as SS Cyg or AE Aqr, there are still different opinions in the astronomical community about their nature and involved physical processes. The field is quite complex and interdisciplinary, and only such complex approach has a chance to deliver anwers to our questions.

Many important questions regarding investigation of CVs and related objects were addressed in Palermo, not only during scientific sessions, but also during numerous discussion among participants. There were plenty opportunities for such discussions during coffee breaks, breakfasts, lunches and dinners, and also during various social activities, all this enjoying the pleasant atmosphere of Sicily (including delicious food, coffee, and wine).

2. Few subjective comments

The cataclysmic variables conference in Palermo represents, in my opinion, another successful workshop confirming Prof. Franco Giovanelli/Vulcano theorem (adopted from famous Vulcano

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Fig. 1. Scientific talks: the discipline of conference participants in attending was great.

Fig. 2. The VIP persons of the conference: Franco and Francesco.

Frascati workshops), namely that one can make serious science even keeping smilling. As already confirmed before by long serie of Vulcano Frascati (and analogous) workshops, the key for productive workshop is as follows: nice environment, dining and staying together, enough (and good) wine (or beer in countries like Czech Republic). And great participants and speakers, of course, and last but not least experienced conference organizers. There was really wide international participation including countries we only rarely meet on conferences. To my knowledge, this was also a first (after 7 years gap) general European CV conference after many years (from Strasbourgh conference on The Astrophysics of Cataclysmic Variables and Related Objects held in 2004). There was participation of both field leaders as well as young scientists in our conference - many of them have got the possibility to meet the famous professors and senior scientists they know from the literature for the first time. Even for me in was I big pleasure to swim in the see together with Paula Szkody!

Personally, I have much appreciated the very high quality of most of invited and review talks. In my opinion, this is not trivial as we face the problem of declining quality of such talks at numerous other conferences.

There were nice carefully prepared reviews by various key speakers covering both theory as well as experiment. These lectures have illustrated and demonstrated the great progress both in theory as well as observation/experiment of CVs and related objects over last years. In addition to that, numerous new and mostly detailed observations on particular CVs were presented and discussed, mostly by young scientific fellows. Some topics discussed (sometimes quite heavily)

Fig. 3. Cultural event (opera). However, there were artists directly among the participants.

Fig. 4. Coffee breaks were great with delicious italian coffee and pastry.

are still (very) controversial: e.g. SS Cyg (magnetic or non-magnetic) and AE Aqr (TeV source yes or not).

Common conclusion of many speakers was as follows: we need more and better data, as well as better statistics. Prospects of some of the future experiments/projects still need to be better formulated, e.g. ESA Gaia. In general, there is a need for better monitoring, multi-lambda observations, and in this direction Robotic Telescopes (RTs) and novel space experiments (e.g. LOBSTER) may help, as proposed and discussed during the workshop.

3. Selected pictures

In my opinion, the following selected pictures taken during the workshop may much better illustrate the scope, atmosphere, and success of the conference better than any more words. The authors of these pictures are Rene Hudec (12 pictures) and Nataly Katysheva (7 pictures).

4. Conclusions

In my opinion, we definitely need this type of workshop, perhaps every 2 years or so. If so, then the natural question arises, namely: where and when to organize next meeting? Palermo again? Italy Adriatic coast? Slovakia High Tatras Mountains? Russian far East? Just to mention a few possibilities I have heard in Mondello. Apart from the site of the next meeting, I believe it will be at least as much productive as this one in Mondello/Palermo in September 2011.

Fig. 5. Proof of Franco Giovanelli Vulcano theorem.

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Fig. 6. New frendships were established in Palermo.

Fig. 7. Discussions.

Fig. 8. Discussions.

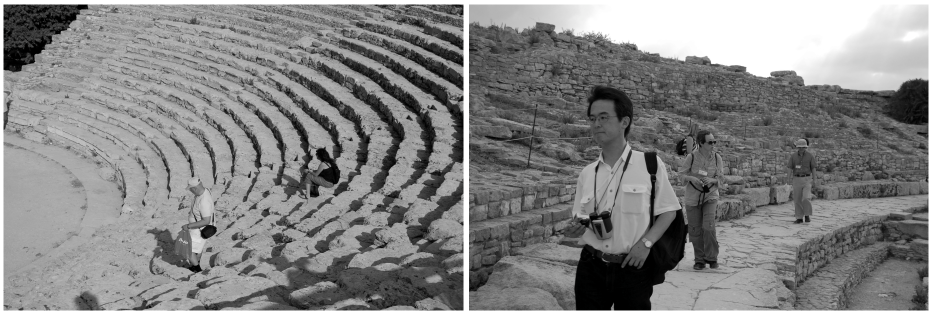

Fig. 9. Conference trip to the nearby archeological place Segesta.

Fig. 10. Discussions.

Fig. 11. Dining together was an important feature of the conference.