ArAS News

NEWSLETTER

ARMENIAN ASTRONOMICAL SOCIETY (A r A S)

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CONTENTS

The Shaw Prize in Astronomy 2020

The Shaw Prize in Astronomy 2020 is awarded to **Roger D Blandford**, Luke Blossom Professor in the School of Humanities and Sciences and Professor at SLAC National Accelerator Laboratory, Stanford University, USA for his foundational contributions to theoretical astrophysics, especially concerning the fundamental understanding of active galactic nuclei, the formation and collimation of relativistic jets, the energy extraction mechanism from black holes, and the acceleration of particles in shocks and their relevant radiation mechanisms.

Roger D Blandford is one of the most outstanding all-round theoretical astrophysicists of his generation. He has made major contributions to an extremely broad spectrum of astrophysical problems, arguably placing him among the rare group of "universal" scientists. He has been one of the leaders in the modelling and interpretation of gravitational lensing. He has contributed to the interpretation of γ-ray data from the Fermi spacecraft and to the study of gravitational waves. His most important research contributions deal with the fundamental understanding of active galactic nuclei (AGN) and their relativistic jets. He is the author or co-author of classic papers that identified the key processes involved in AGN, driven by accreting massive black holes. These same processes are also relevant to γ-ray bursts and stellar-mass black holes. He and his collaborators originated key ideas leading to the spectacular multi-scale acceleration and collimation of relativistic jets, involving complex fluid-dynamical and electro-dynamical processes. One of his most prescient contributions was the recognition that magnetic torques could extract energy from a spinning (Kerr) black hole, and thus efficiently drive jets.

Blandford's contributions to this subject began with analytic work, but in recent papers he and his collaborators have exploited increasingly sophisticated numerical techniques to capture realistically the complex physics in the strong gravity environment of spinning and accreting black holes.
In addition to his research, **Roger Blandford** stands out because of his tireless participation in community service, culminating in the leadership of the 2010 US decadal survey in astrophysics. **Blandford**'s many profound contributions to theoretical astrophysics and his continuing originality and towering presence make him a worthy recipient of the 2020 Shaw Prize in Astronomy.

Astronomy Selection Committee
The Shaw Prize
https://www.shawprize.org/prizes-and-laureates/astronomy/2020/press-release

IAU Dark Skies Ambassadors Program

The IAU Dark Skies Ambassadors is a program that invites keen enthusiasts worldwide to be dark sky advocates and spread the word of the concern of light pollution. Dark Skies Ambassadors organise actions, get others to do events and/or do events, and help advertise events. Joining the program could also create a peer-supporting environment and provide visibility of events.

Credit: Sze-leung Cheung

Dark Skies Ambassadors shall promote the importance of dark-sky protection by conducting or motivating others to conduct any of the following:

- Conduct classroom or after-class educational activities (such as using the resources linked on darkskies4all.org or the Turn on the Night kit to provide workshops);
- Organize teacher training or community workshops;
- Organize actions around the International Day of Light 16 May;
- Participate or advertise dark-sky campaigns (such as Globe at Night);
- Give presentations on light pollution;
- Identify bad lightings and inform your local government, and explain to them why they are bad;
- Promote awareness to the journalist;
- Advocate for lighting ordinances or monitor your night skies;
- Talk to your neighbours on good lighting;
- Share the Dark Skies messages with the communities;
- Writing articles or promoting on social media;
- Promote the best practices of the use of lightings (use full cut-off fixtures, low colour temperature <3000K lighting, no blue-rich white LEDs);
- And any other innovative ideas.

For more details and sign up please follow the link:

Penumbral Lunar Eclipse

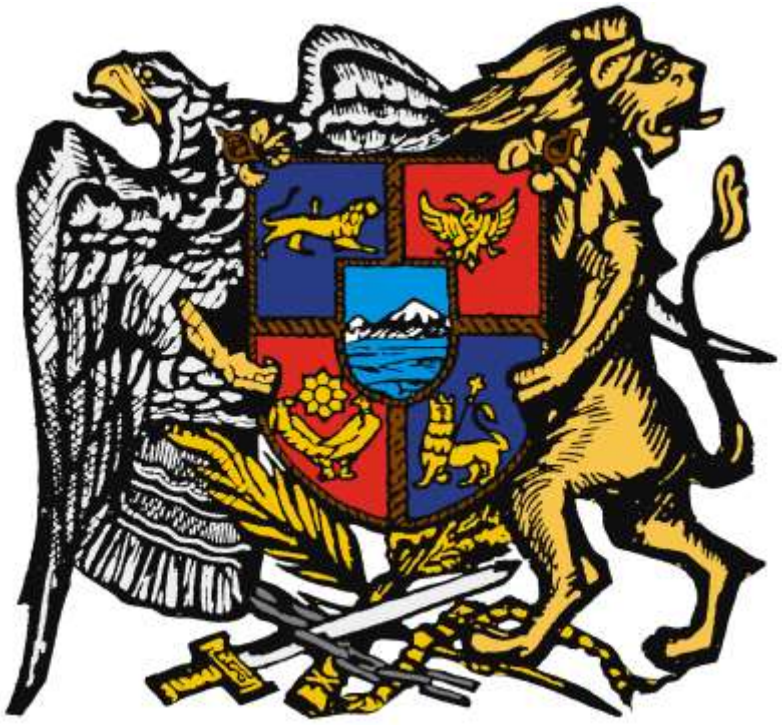
On both June 4 and 5, 2020, the moon will look full to the eye as it shines from dusk until dawn. On both nights, the moon will be close to the red supergiant star Antares, brightest star in the constellation Scorpius the Scorpion. The crest of the moon's full phase – when the moon and sun are most opposite each other on our sky's dome for this month – happens on June 5, 2020, at 19:12 UTC: translate UTC to your time. For us in North America, that means the moon turns precisely full during the daylight hours on June 5, when the moon will be below our horizon. Yet the other side of the world – those who can see the moon in the sky around the time it turns precisely full – will have access to a lunar eclipse. It's the most subtle kind of lunar eclipse, one that most people won't even notice: a penumbral eclipse of the moon.

For details, visit the Virtual Telescope Project: https://www.virtualtelescope.eu/2020/05/09/5-june-2020-penumbral-lunar-eclipse-online-observation/

First Republic of Armenia

On May 28 Armenia celebrates the day of the first Republic.

The First Republic of Armenia, officially known at the time of its existence as the Republic of Armenia was the first modern Armenian state since the loss of Armenian statehood in the Middle Ages. The republic was established in the Armenian-populated territories of the disintegrated Russian Empire, known as Eastern Armenia or Russian Armenia. The leaders of the government came mostly from the Armenian Revolutionary Federation (ARF or Dashnaktsutyun). The First Republic of Armenia bordered the Democratic Republic of Georgia to the north, the Ottoman Empire to the west, Persia to the south, and the Azerbaijan Democratic Republic to the east. It had a total land area of roughly 70,000 km², and a population of 1.3 million.



The Armenian National Council declared the independence of Armenia on 28 May 1918. From the very onset, Armenia was plagued with a variety of domestic and foreign problems. A humanitarian crisis emerged from the aftermath of the Armenian Genocide as tens of thousands of Armenian refugees from the Ottoman Empire settled there. The republic lasted for over two years, during which time it was involved in several armed conflicts caused by territorial disputes. By late 1920 (December 2), the nation was conquered by the Soviet Red Army. The First Republic, along with the Republic of Mountainous Armenia which repelled the Soviet invasion until July 1921, ceased to exist as an independent state, superseded by the Armenian Soviet Socialist Republic that became part of the Soviet Union in 1922. After the fall of the Soviet Union, the republic regained its independence as the current Republic of Armenia in 1991.

ASTRONOMICAL CALENDAR
JUNE, 2020

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1 VOSS 2020: 17th summer school in astrophysics (Vatican Observatory)	2	3	4 Mercury at Greatest Eastern Elongation	5 Full Moon Penumbral Lunar Eclipse	6	7
8 IAUS 362: Predictive Power of Computational Astrophysics as a Discovery Tool (Chamonix, France)	9	10	11	12 Conjunction of Mars and Neptune	13 Lunar crescent (last quarter)	14
15	16	17	18	19	20 Summer Solstice: The June solstice occurs every year between June 20 and June 22.	21 Annular Solar Eclipse New Moon
22 IAUS 363: Neutron Star Astrophysics at the Crossroads: Magnetars and the Multimessenger Revolution (L'Aquila Italy)	23	24	25	26	27	28 Lunar crescent (first quarter)
29 European Astronomical Society Annual Meeting (EAS) (Leiden, Netherlands)	30					