galaxies star formation rate and between the level of obscuration of AGN and their host galaxies physical properties.

233.06 — Chandra Observations of New Quadruply Lensed Quasars

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Our and others' previous work has shown the unique power of Chandra observations of quadruply gravitationally lensed quasars to address several fundamental astrophysical issues. We have used these observations to (1) determine the cause of flux ratio anomalies, (2) measure the sizes of quasar accretion disks, (3) determine the dark matter content of the lensing galaxies, and (4) measure the stellar mass-to-light ratio (in fact, this is the only way to measure the stellar mass-to-light ratio beyond the solar neighborhood). In all cases, the main source of uncertainty in the results is the small size of the sample of known quadruply lensed quasars; until recently, only about 15 systems were available for study with Chandra. We have been granted Chandra observations of seven recently discovered quadruply lensed quasars and one quintuply lensed quasar, and we report preliminary results from these observations.

Special Session 234 — HAD V: IAU-100: Celebrating One Hundred Years of International Astronomy

234.01 — The International Astronomical Union: from its first 100 years into the Next Century

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The International Astronomical Union was founded in 1919 "to facilitate the relations between astronomers of different countries where international co-operation is necessary or useful" and "to promote the study of astronomy in all its departments." These aims have led the IAU throughout the century of its existence, but the way it has tried to fulfil them has changed. In our book 'The International Astronomical Union: Uniting the Community for 100 Years', Johannes Andersen, Claus Madsen and I traced the changing role of the IAU in the international astronomical community through the twentieth century and into the twenty-first. The IAU has striven - occasionally struggled - to protect international scientific cooperation across the deep political divides that characterized the 20th century. Also, as the science of astronomy changed, the IAU had to find and redefine its role in the rapidly changing international community of astronomers. We especially argue how the emphasis of the IAU's activities has shifted from the first aim - facilitating collaboration by organizing meetings and defining common standards - to the second aim: promoting astronomy by outreach and development programs.

234.02 — Curtis-Shapley, Bondi, Woltjer, and Me: 100 years of the Universe and its Contents

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April 2020 brings us to the 100th anniversary of the Curtis-Shapley debate on the distance scale of the universe. As is often the case with such disputes, each was right about roughly half of the points on which they disagreed. Shapley himself soon got us out of the center of the Milky Way; and Hubble in 1923 confirmed Curtis's faith in the existence of other galaxies. About a third of the time from their day to ours, Bondi published a cosmology text whose subject headings, another third of the way to the present, Lodewijk Woltjer used as the outline of concluding remarks at two different conferences. He in turn (in Europe's Quest for the Universe) has left us a double handful of questions that still call for answers, from the nature of dark matter & dark energy to the atmospheres of the most earth-like exoplanets, some of which will call for impressively new facilities, even by his VLT standards, let alone those of Bondi, Curtis, and Shapley (who often said that Hubble's problem was that his telescope was too big). An attempt will be made to follow a few of the threads from 1920 to 2020, with due regards to the significance of new ideas, new technology, new observations, and new people. A few likely threads include the distance scale, dark matter, and degenerate stars. Hubble used the largest telescopes then available; Bondi invoked some of the greatest minds of his time, including his own; and Woltjer in effect did both. They are a tough act to follow! It is perhaps slightly ominous for future disputes in these territories that, of the 14 points on which C & S disagreed, each was right mostly about the items that depended on his own observations.