



*Amateur Astronomers  
Association of Princeton*

## *September Club Meeting* *September 10, 2024 at 7:30pm*

### **Lighting Up the Dark: Where is the Dark Matter?**

*Gravitational lensing and other phenomena help to show the distribution of mass within galaxies and throughout the universe, revealing the connection between the dark and bright sides of the Universe. On galactic scales, the observed mass distribution extends considerably beyond the dimensions we observe in luminous objects. How can stars, which represent only about one percent of the total mass of the universe, follow the total mass so well? Where are the rest of the baryons? Prof. Bahcall will discuss the connection between baryons, stars, and mass at large scales, and the implications for galaxy formation, the mass-density of the universe, and cosmology.*



*guest speaker*

#### **Professor Neta Bahcall**

Prof. Bahcall is the Eugene Higgins Professor of Astrophysics at Princeton University. She is Director of the Undergraduate Program in Astrophysics, and past Director of the Council on Science and Technology of Princeton University. Prof. Bahcall earned her PhD from Tel-Aviv University, working in Nuclear Astrophysics under the direction of Prof. William A. Fowler of Caltech. She was the first Head of the Science Program Selection Office and Chief of the General Observer Branch at the Space Telescope Science Institute (STScI) in Baltimore. Prof. Bahcall is an elected member of the National Academy of Sciences, and past-chair of its astronomy section.

*Peyton Hall, Princeton University and on Zoom*  
*free to attend – all are welcome*

AAAP Club Meetings are held monthly from September through June. For more details including the Zoom link and information about this month's presentation, visit [www.princetonastronomy.org](http://www.princetonastronomy.org)

