

A Brief Column for the Beginning Stargazer Introducing a New Astronomical Term Each Month

Astronomy is rich with terminology. This column will help beginning stargazers ease into the world of astronomy by *briefly introducing* a new but *basic astronomical term* (word, acronym or abbreviation) each month. This list, which began January 1999 with the letter *a*, is alphabetical but uses successive letters for each month's entry. (We will return to the letter *a* after twenty-six months.)

Word of the Month for August 1999

Huygens eyepiece A simple, old telescope eyepiece design consisting of two *planoconvex* lenses with their convex surfaces facing the telescope's objective. (Planoconvex means one flat and one convex face.) Since Huygens eyepieces are inexpensive and simple to construct, they are often used on small *refractors* (lens telescopes). However, images suffer seriously from optical *aberrations* (imperfections) especially if used on telescopes with *focal ratios* (focal length to

diameter) less than $f/10$. Usually Huygens eyepieces are a very poor substitute for modern eyepiece designs, and telescopes sold with such eyepieces are often also poorly made. Hence, modern telescopes sold with Huygens eyepiece typically denote "trash telescopes" and should be avoided

Christiaan Huygens (1629–95), a Dutch mathematician, physicist and astronomer, invented this eyepiece design in 1703. Huygens is also well known for his other contributions to science including the first pendulum clock, construction of aerial telescopes (tubeless telescopes), principle of angular momentum, wave theory of light, and his discoveries of the rings of Saturn and *Syrtis Major* (a prominent dark, wedge-shaped feature on Mars).

References. J. Mitton 1991, *Concise Dictionary of Astronomy* (Oxford Univ. Press); I. Ridpath 1997, *A Dictionary of Astronomy* (Oxford Univ. Press). ☼