

## SCHOOL OBSERVATORY WALDBRÖL

SCHNÖRRINGEN TELESCOPE SCIENCE INSTITUTE (STSCI)

## START IN THE SKY

Again and again we are asked which telescopes are suitable for absolute beginners and how much they cost, especially if one wants to introduce children to the stars. Of course, the instruments should not be too expensive for a first attempt, but they should be fun and arouse curiosity for more. Such telescopes for beginners are no longer as expensive as in the past where one had to put easily several thousand \$US, but we find, also a few hundred Dollars are already a lot of money for a first attempt. And too cheap devices like to wobble and spoil the fun. Therefore, we recommend small steps to check if the interest lasts.

Apart from observing the sky with the naked eye (we all start with it), binoculars are a good choice for first instrumental observations. The numbers on the instruments (e.g. 7 x 50) indicate the magnification factor and the lens diameter and thus the light gathering power (the larger the more powerful but also heavier). Some people already have such binoculars in their households, and they quickly realize that binoculars in the hand are a pretty shaky affair. And one dislocates thereby the neck. Instead of taking the binoculars in the hand, one can look for suitable square timbers in the hardware store, from which one builds a frame, which is attached over a garden couch. Or one fixes the binoculars over a pendulum arm with counterweight to a tripod. If the binoculars are attached to such a "swing", one can

comfortably roam the sky while lying down with a very large field of view without distorting the neck and observe the moon, planets, but also open star clusters more closely. Or one can track a comet.

Binoculars are available for little money in the second-hand market, a couch as well and the wood is not expensive either. Children immediately have fun making things with a guarantee of success, and if the desire for more grows afterwards, one can always buy a telescope.

