

**Tagung des Arbeitskreises Astronomiegeschichte
in der Astronomischen Gesellschaft**

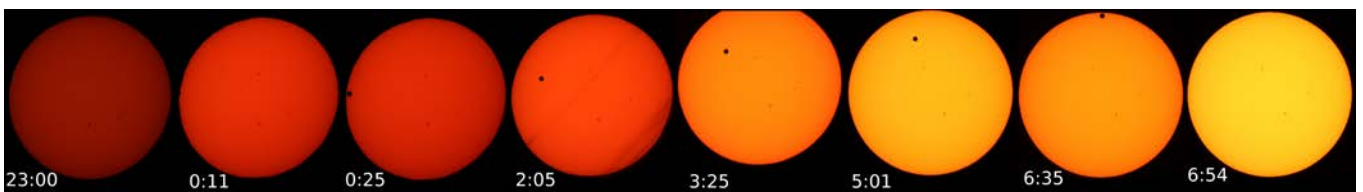
***Kometen, Sterne, Galaxien -
Astronomie in der Hamburger Sternwarte***

Hamburg, 23.-24. September 2012

**Poster:
Transit of Venus**

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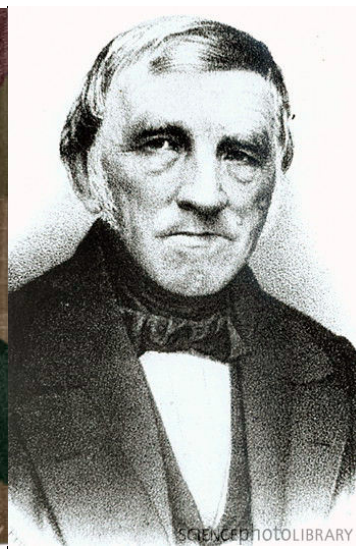
This year's biggest astronomical event, the transit of Venus, is a great chance to repeat the historical measurements to determine the astronomical unit absolutely. I send to expeditions of youngsters to different places of the world to observe this transit and measure contact times: one to Norway and two to Siberia.



Joseph Nicolas Delisle



Edmond Halley



Johann Franz Encke

In a weekend-workshop we evaluated their data with the historical methods of Halley and Delisle and got the absolute scale of the solar system. Additionally, we used the historical method of Encke to evaluate those data. In his calculations concerning this problem he first used the least square fit to estimate the errors of his value. Like us, he also took historical data, because he himself was born after the transits of Venus in 1769 and died before the transit in 1874. So, he never observed a transit, but only evaluated the data of other observers with a tremendous mathematical accuracy.

My work is about the repetition of the historical analysis with modern methods and develop educational concepts for this evaluation.