## On the determination of the angular distance between sun und venus.



Measuring principle: Two rods are beeing positioned at $\boldsymbol{A}$ und $\boldsymbol{C}$, so that their pointed ends get in line with the ray directed from the eye to venus. Simultaneously the sun projects onto a wall at $\boldsymbol{B}$ the shadow of the rod at $\boldsymbol{C}$. The angle $\measuredangle B C A$ from the resulting triangle $\boldsymbol{A B C}$ is corresponding to the angular distance between sun and venus. By measuring the lengths of $\mathrm{a}, \mathrm{b}$ and c , the angle $\measuredangle B C A$ can be derived by calculation.

Measured data: (Place: La Palma)

| date | local time | $\boldsymbol{a}[\mathrm{cm}]$ | $\boldsymbol{b}[\mathrm{cm}]$ | $\boldsymbol{c}[\mathrm{cm}]$ | $\measuredangle B C A$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 21.12 .2002 | $9: 10$ | 226,5 | 64,6 | 187 | $45,5^{\circ}$ |
|  | $9: 30$ | 220 | 68,0 | 179 | $45,5^{\circ}$ |
|  |  |  |  |  |  |
| 26.12 .2002 | $9: 15$ | 190,5 | 52,7 | 157,5 | $44,7^{\circ}$ |
|  | $9: 30$ | 185,5 | 52,6 | 152,5 | $44,5^{\circ}$ |
|  | $9: 35$ | 183,5 | 52,3 | 150,5 | $44,2^{\circ}$ |

