

## **COSMIC RAYS AND SOLAR ACTIVITY**

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This work aims to give a brief overview on the topic of cosmic ray modulation in the heliosphere. The heliosphere, heliospheric magnetic field, transport parameters and the transport equation together with modulation models, which solve this equation in various degree of complexity, are briefly discussed. Results from these models are then presented where first it is shown how cosmic rays are globally distributed in an asymmetrical heliosphere which results from the relative motion between the local interstellar medium and the Sun. Time-dependent modulation is also discussed in such a realistic heliosphere where it is shown how drift effects together with propagating diffusion barriers are responsible for modulation over a solar cycle.

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