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## Simulation of the optical performance of the Fluorescence detector Array of Single-pixel Telescopes

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The Fluorescence detector Array of Single-pixel Telescopes (FAST) is a proposed large-area, next-generation experiment for the detection of ultra-high energy cosmic rays via the atmospheric fluorescence technique. The telescope's large field-of-view ( $30^\circ \times 30^\circ$ ) is imaged by four 200 mm photomultiplier-tubes at the focal plane of a segmented spherical mirror of 1.6 m diameter. Two prototypes are installed and taking data at the Black Rock Mesa site of the Telescope Array experiment in central Utah, USA. We present the process used for optimisation of the optical performance of this compact and low-cost telescope, which is based on a simulation of the telescope's optical point spread function.

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