

## PERISCOPE THEOREM

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Let  $F : D_1 \rightarrow D_2$  be a diffeomorphism of two domains on a plane. Consider a parallel bundle of light rays through  $D_1$  perpendicular to the plane. We consider the following problem.

Find a system of mirrors which transforms this bundle to a parallel bundle through  $D_2$  perpendicular to the plane such that any ray through  $x \in D_1$  is transformed to the ray through  $F(x) \in D_2$ .

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