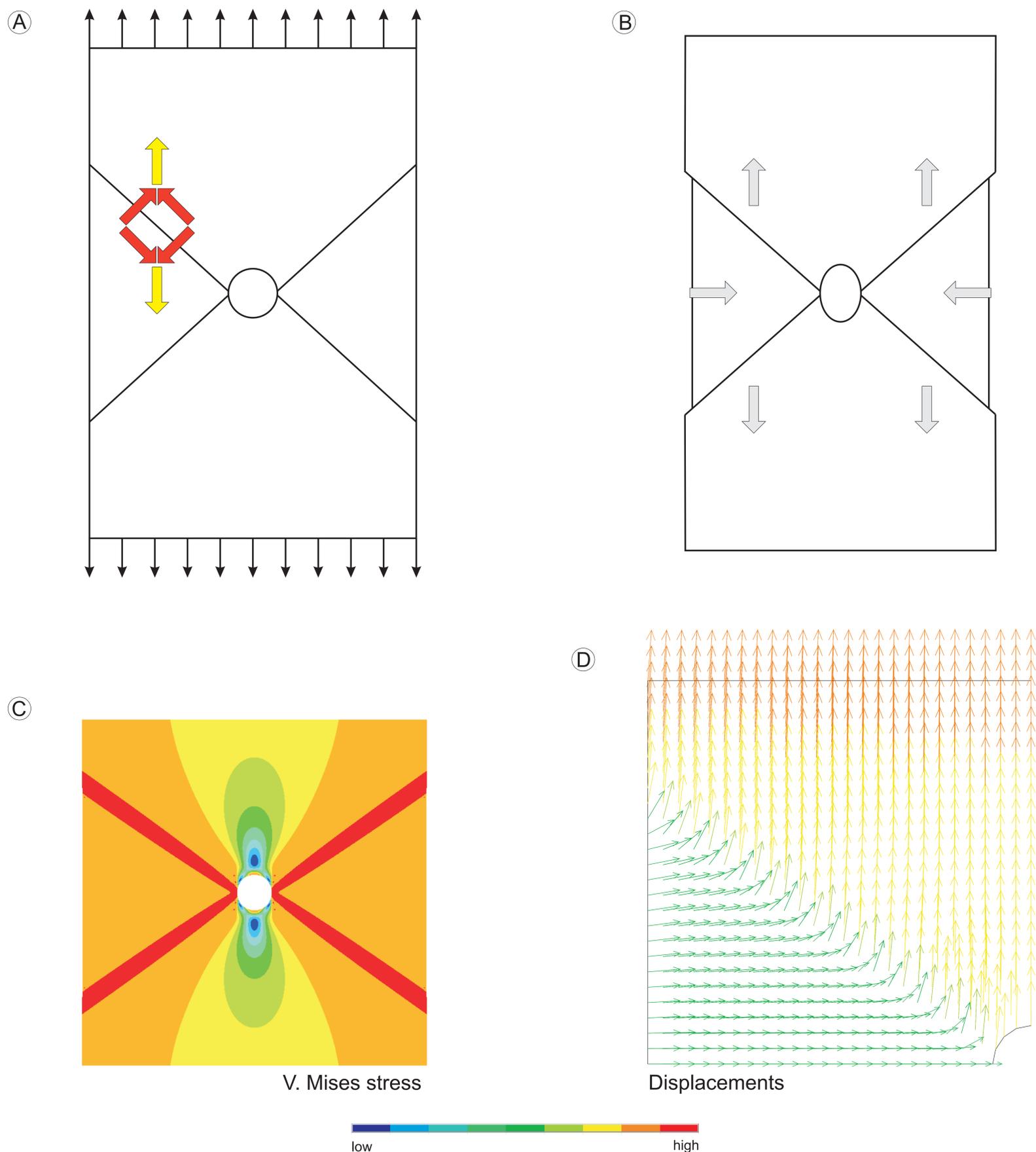


# The Plastic Zone as a 90° Direction Change of the Displacements

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A tension loaded plate with a hole and elastic-plastic material with sparse hardening was analyzed with the Finite-Elemente-Methode. The plastic slip lines cause here 90° direction changes of the displacements.



- (A) Shear square at the slip line    (B) Direction of the displacements    (C) V. Mises stress, red: plastified regions  
 (D) Displacement vectors (quarter model)