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**David Wright\*** ([wright@math.wustl.edu](mailto:wright@math.wustl.edu)), Campus Box 1146, One Brookings Drive, St. Louis, MO 63130, and **Arno van den Essen** and **Wenhua Zhao**. *New conjectures related to the Jacobian Conjecture.*

The famous Jacobian Conjecture has been reformulated in several equivalent ways. We present an intriguing new conjecture of Zhao, the Image Conjecture, which would imply the Jacobian, and which leads to a fascinating assertion dubbed the Factorial Conjecture. These utilize the newly defined concept of a Mathieu subspace of a ring. (Received September 09, 2010)