David Bao* (bao@math.sfsu.edu), Department of Mathematics, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132. Curvatures in Riemann-Finsler Geometry.

There are two essential curvatures in Riemann-Finsler geometry. Each of the two curvatures gives rise to an interesting area of research. One is the so-called Unicorn problem, and the other is the concept of Ricci flow for Finsler metrics. Both problems involve highly non-linear but interesting partial differential equations. The talk intends to give a brief introduction to these two research topics. (Received March 07, 2008)