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## **The Geometry of Scales**

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*Abstract:* In the very beginning of the development of topology, topologists were studying uniform spaces which are a kind of global topological space. To put it simply, uniform topology is the study of spaces as one "uniformly looks at the space closer and closer". The dual concept of coarse geometry, which is the study of spaces when you uniformly "view them from greater distances", became popular in the late 20th century. It has only been recently that mathematicians have been mixing the two concepts and studying coarse geometry and uniform topology alongside each other. J. Dydak, M. Holloway, and I are finishing up three papers which focus of the combination of coarse and uniform concepts and on the duality between the two concepts. I will discuss our results and try and show you how unifying coarse and uniform concepts enriches both simultaneously.