

Ralph Henstock, Department of Mathematics, University of Ulster, Coleraine,  
Co. Londonderry BT52 1SA, Northern Ireland

## **Measure Spaces and Division Spaces**

Many non-atomic measure spaces are constructed geometrically from simple objects, and division space integrals are often produced from them. It has not been obvious how to construct a division space when the non-atomic measure space is given axiomatically. But if it has a locally compact topology, the paper shows how the division space can be constructed, defines two integrals, and proves them equivalent.