

1154-A1-965 **Mike Janssen*** (mike.janssen@dordt.edu), Dordt University, Math/Stats Department, Sioux Center, IA 51250. *An Open Source Inquiry-Based Abstract Algebra Text.*

In this talk, a new open source, inquiry-based abstract algebra textbook will be introduced. The text is currently designed for students who have taken at least one proof-based course. After a review of properties of the integers, the text explores ring theory through the lens of factorization, seeking to find conditions sufficient to guarantee unique factorization. The book is authored in PreTeXt, and so will be available in both HTML and PDF forms, and the source code is also available for download. (Received September 12, 2019)