## 962-C1-1441

Joan S. Bookbinder\* (Joan@livemath.com), 1415 W. Richmond Street, Arlington Heights, IL 60004. LiveMath: Dynamic and Interactive Mathematics for All Your Classes...Traditional and Online.

This presentation will demonstrate how math educators can effectively use LiveMath Maker, a mathematics software package, to enhance the teaching and learning of mathematics in both the traditional as well as the online classroom. LiveMath empowers the instructor and students to easily set up problems and show how they are solved, step by step in a "notebook." Any value or variable can be changed and the updates are shown step by step in the notebook, dynamically. No code to learn, no clumsy operators...just drag and drop for symbolically correct math.

Its powerful recalculation feature is similar to a spreadsheet, except that this is mathematics, equations solving, factoring, graphing 2D and 3D, derivatives, integration, etc. Each step is recalculated, not just the answers. This powerful tool allows the students to explore a mathematical scenario, draw conclusions, learn by the discovery method, and see the steps and processes involved.

What's more, LiveMath is live and interactive on the Internet. Notebooks can be easily embedded into any webpage and shared by way of a free browser plug-in. Math is explored live on the web, dynamically and interactively, including animated 2D and 3D graphs. Mathematics on the web is no longer static; it is alive and exciting with almost no limitations of what can explored. From lower level to upper level undergraduate, this program challenges the way we teach and the way students learn. (Received October 12, 2000)