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SAW Three-day Meeting

How do writings in the astral sciences
document mathematical practices and the practitioners?

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Dialing, geometry and proof in early 16th-century Europe: Stabius's paper instruments

Abstract - In a number of recent papers, Jim Bennett has described dialing as an important craft component of 16th-century cosmography. Combining the skills of engravers, printers, cartographers, cosmographers, instrument-makers, astrologers and mathematicians, dialers created geometrical tools to solve practical problems like time-telling, surveying, navigating, laying out fortifications, or measuring volumes of casks. Dialers, Bennett argues, transmitted their innovations as "constructive techniques", not as demonstrations or explanations. In this paper, I will examine the constructive techniques in a set of four paper instruments designed by Johann Stabius, historian and mathematician at the court of Emperor Maximilian I, and printed as broadsides in 1512-15. I will consider examples of other contemporary dialers experimenting with constructive techniques and will ask whether these techniques alone, without appeal to geometrical proof, enabled innovative instrument designs to emerge.