1046-13-939 **Jason Greene Boynton** and **Jim Coykendall*** (jim.coykendall@ndsu.edu), Department of Mathematics, North Dakota State University, Fargo, ND 58105-5075. *Atomicity of certain pullback constructions.*

The authors consider certain pullback constructions in the spirit of $\mathrm{Int}(E, D)$. It is well known that if E is a finite set, then $\mathrm{Int}(E, D)$ is nonatomic. Since $\mathrm{Int}(E, D)$ may be defined by a conductor square, it is natural to ask (when considering factorizations questions in particular) if this nonatomicity property persists in the more general setting. The authors show that although nonatomicity is "usually" to be expected in the more general case, certain restrictive conditions do allow atomicity to be forced. (Received September 12, 2008)