1166-13-107 **Rebecca R.G.*** (rrebhuhn@gmu.edu), **Neil Epstein** and **Janet Vassilev**. *A dual to basic fullness.* Preliminary report.

The notion of a *basically full* ideal or submodule, in the context of a Noetherian local ring, was pioneered by Heinzer, Ratliff, and Rush in 2002. From this definition, we get a closure operation on $\mathfrak{m}$-primary submodules of a finitely generated module, called the *basically full closure*. We study a dual notion, called *basic emptiness*, which comes from an interior operation dual to basically full closure. This allows us to find dual versions of the results of [HRR02]. Along the way, we adapt previous work of two of the authors to define the dual of a non-residual closure operation. This work is joint with Neil Epstein and Janet Vassilev. (Received February 15, 2021)