

1117-13-192

Sean Sather-Wagstaff and **Jonathan Totushek*** (jtotushe@uwsuper.edu). *Complete intersection injective dimension and the Chouinard Formula*. Preliminary report.

Let (R, \mathfrak{m}, k) be a local ring and let X be an R -complex. It is known that $\text{Gfd}_R(X) \leq \text{CI-fd}_R(X) \leq \text{fd}_R(X)$ where fd is the classical flat dimension, CI-fd is the complete intersection flat dimension of Sather-Wagstaff, and Gfd is the Gorenstein flat dimension of Enochs, Jenda, and Xu. However, it remains an open question if $\text{Gid}_R(X) \leq \text{CI-id}_R(X) \leq \text{id}_R(X)$ where id is the classical injective dimension, CI-id is the complete intersection injective dimension of Sather-Wagstaff, and Gid is the Gorenstein injective dimension of Enochs, and Jenda. In this talk we will investigate how the Chouinard formula relates to the complete intersection dimension and show some special cases when the latter set of inequalities hold. (Received January 13, 2016)