Dror Bar-Natan: Academic Pensieve: Classes: 17-SummerHomology:

Fifth Meeting

June 30, 2017   1:29 PM

$\underline{\text{Excision}}$ $A \subset X$, $V \subset A$ open w/ $\bar{V} \subset \text{int} A \Rightarrow$

$$H_*(X-V, A-V) \xrightarrow{\sim} H_*(X, A)$$

$$H_{n-1}(S^{n-1}) \overset{\cong}{\underset{}{=}} H_n(D^n, S^{n-1}) \overset{\cong}{\underset{}{=}} H_n(D^n, A^n) \overset{\cong}{\underset{}{=}} H_n(S^n, D^n_-) \overset{\cong}{\underset{}{=}} H_n(S^n)$$

$\quad$ LES of (D^n, S^{n-1}) $\qquad$ homotopy $\quad \bigcirc$ annulus $\qquad$ Excision $\qquad$ L.E.S. of (S^n, D^n_-)

Continue as in Accra: Day 5: Proof of Excision.