

$$P_{Newton,p}\left(\frac{d}{2}\right) - P_{Hodge}\left(\frac{d}{2}\right) = \text{ord}_p(\alpha_{\mathbf{f},p})$$

$\alpha_{\mathbf{f}}$  an eigenvalue  $U_p \mathbf{f}_0 = \alpha_{\mathbf{f}} \mathbf{f}_0$  of  
Atkin's type operator  $U_p$  on a  
Hermitian cusp form attached to  $\mathbf{f}$