1106-42-631 Keaton Hamm* (khamm@math.tamu.edu). Approximation Rates in Scattered-data Interpolation. We aim to discuss some of the techniques required for sampling bandlimited functions at scattered data sites. We will also discuss how certain types of approximation rates can be found in this setting. The techniques involved actually allow approximation rates for recovery of certain Sobolev functions in addition to bandlimited ones. Our main concrete example will be of forming an interpolating function by shifts of the Gaussian kernel. (Received September 03, 2014)