1125-AB-640 Kimball Martin\* (kmartin@math.ou.edu), Norman, OK 73019. Central L-values and functorial transfer.

Central values of L-functions that appear in number theory encode fundamental arithmetic information. A powerful way to study these values comes via Langlands functoriality. We will first explain these ideas, including old and new results, with explicit examples of elliptic curves and modular forms, and then discuss some mostly conjectural generalizations to higher dimensions. (Received September 08, 2016)