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In this talk I'll use recent numerical experiments to explore the nature of energy transfer through the fabled internal wave continuum. First, we consider diagnostic situation of down-scale energy transfer pathways through a well developed, GM-like wavefield. Results will be compared with the analytical and empirical framework behind the popular Gregg-Henyey-Polzin type scalings used to diagnose turbulent mixing from fine-scale measurements. Second, we consider a prognostic experiment, in which simulations are initialized with one or two coherent energy containing waves (tidal or near-inertial) and a full spectrum allowed to develop in equilibrium with the low-frequency energy input. The resultant rate of down-scale energy transfer may be useful for development of mixing parameterizations in large-scale models, which are increasingly able to resolve low-frequency internal waves but not the entire continuum.