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Title: *The contiguous domains of Arctic Ocean advection: trails of life and death*

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The talk looks upon the circulation in and transport to and from the Arctic Ocean and how advection supports contiguous and macroecological domains. In particular the talk focuses upon the distribution and advection of mesozooplankton and addresses a set of questions. How is the interaction between local versus advected "production" in the Arctic Ocean? Does advection make the Arctic Ocean a potentially net-heterotrophic region? What is the fate of the advected mesozooplankton biomass: trails of death for themselves or trails of life that feeds hungry planktonic carnivores or the benthos? How much arctic mesozooplankton leaves the Arctic Ocean? Do we deal with the same or separate populations of long-lived, arctic species in the Atlantic-Arctic domain? How will the import/export relationships develop during climate warming? It is concluded that the mesozooplankton death march into the Arctic Ocean is part of the persistent invasion/ withdrawal battle of subarctic versus arctic species where death is a "calculated" risk for potential progeny.