Abstract for Michael Lachmann

Title: A value for information in biology

Abstract: What is a signal worth, how much information does it carry? Two different approaches tackle this question in biology. On the one hand, one can measure the information carried by the signal in bits - the entropy reduction that it provides, on the other, one can ask about the fitness benefit that the signal provides - the increase in the number of offspring expected when the signal is used. In my talk I will try to ask whether these two measures have anything to do with one another. Is there a connection between fitness and Shannon's measure of information?