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Heterochrony in speciation events: asexuals seems to go faster

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Phylogenetic heterochrony can be perceived in how distantly related pairs of sister species are, in the rate of diversification events through time of specific clades, and in the biological mechanisms driving such differences. The vast amount of genetic information across most of the animal kingdom on one partial locus, the mitochondrial cytochrome c oxidase subunit I, gathered by extensive molecular barcoding and population genetics projects, allows us (i) to compare the actual differences even across closely related taxa and (ii) to learn how to deal with such differences. I will explore how the currently available methods in DNA taxonomy can cope with heterochronous speciation rates, and I will provide some examples of the potential mechanisms driving heterochrony focusing on the comparison between sexual and asexual rotifers.