Ken H. Andersen The me mechanistic trait-ba app

Light harvesting

Nutrient harvesting

Phagotrophy

Cell size

Ocean Life - a VKR centre of excellence









Data from Edwards et al (2015) and Kiørboe (2011)

Simplified from Ward and Follow (2016)

DTU



Size-based plankton simulator

Simulate a plankton ecosystem in the upper part of a watercolumn. Cell size is the only trait characterizing each via kion group. All groups are able to perform photoharvesting, taking up dissolve nutrients and carbon, and do phagotrophy. The trophic stratecy is an emergent property.

Not Secure - oceanlife.dtuaqua.dk

THIS IS WORK IN PROGRESS. Version 0.8. May 2019.

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Climate change impact on plankton ecosystem function



Serra-Pompei et al (2019) Limn. Oceanography





Plenty of resources









That distribution $B(\theta)$

1) Which traits? 2019 Summer 2) Functional groups vs traits?

Web app: http://oceanlife.dtuaqua.dk/Plankton/

Cell Light Diazotro Vacuole Shell

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Web app: http://oceanlife.dtuaqua.dk/Plankton/ Marine mixotrophy increases trophic transfer efficiency, mean organism size, and vertical carbon flux











Chakraborty et al, Am Native (Active (





