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## Biophysical self-organization of coastal wetlands

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# **Biophysical self-organization of coastal wetlands**

Unraveling spatial complexity on tidal flats and marshes,  
from the Precambrian to today

**Roeland Christiaan van de Vijzel**

**Front cover:** Spatial pattern of algal-covered ridges and bare runnels on Ketenisse mudflat, Schelde estuary, Belgium. Photo taken by Roeland C. van de Vijssel.

**Back cover:** Aerial view on a complexly branching network of channels on a tidal marsh in Venice Lagoon, Italy. Photo taken by Roeland C. van de Vijssel.

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The research presented in this thesis was carried out at the Department of Estuarine and Delta Systems (EDS) of the Royal Netherlands Institute for Sea Research (NIOZ) in Yerseke (The Netherlands), and the Conservation Ecology Group, part of the Groningen Institute for Evolutionary Life Sciences (GELIFES) of the University of Groningen (The Netherlands). This research was supported by the Dutch Research Council (NWO) as part of the programme “The New Delta” (project number 869.15.003). Printing of this thesis was financially supported by NIOZ and the University of Groningen.

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Unraveling spatial complexity on tidal flats and marshes,  
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to obtain the degree of PhD at the  
 University of Groningen  
 on the authority of the  
 Rector Magnificus Prof. C. Wijmenga  
 and in accordance with  
 the decision by the College of Deans.

This thesis will be defended in public on

Friday 19 March 2021 at 14:30 hours

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