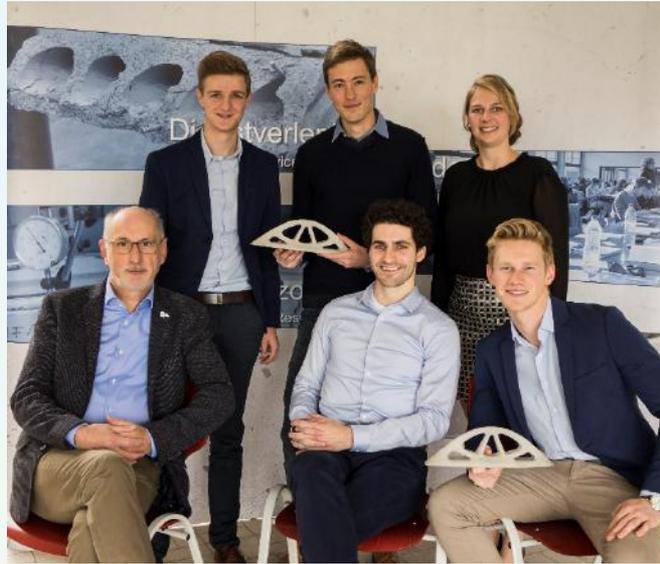




The Concrete Convention and Exposition



2018 FRC Bowling Ball Competition



**Jordi Uyttersprot, Gieljan Vantyghem, Kizzy Van Meirvenne,
Luc Taerwe, Ticho Ooms, Pieter Vijverman**

Ghent University

Faculty Advisor: Luc Taerwe

2018 FRC Bowling Ball Competition



CONTENT

- University and Team Presentation
- Locally won (Concrete) Competitions

2018 FRC Bowling Ball Competition

Ghent UNIVERSITY

(Belgium)

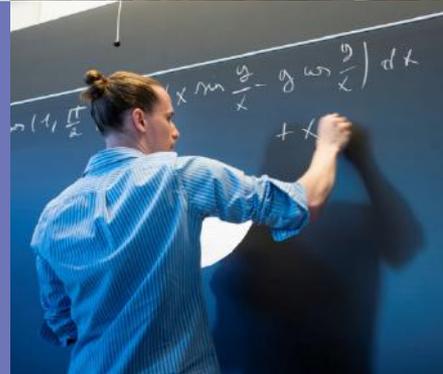


2018 FRC Bowling Ball Competition



 **FACULTY OF ENGINEERING
AND ARCHITECTURE**

**Labo Magnel & Research Group
Schoonmeersen**



2018 FRC Bowling Ball Competition

LOCALLY WON COMPETITIONS

Infobeton Student contest 2016

Ultimaker Education challenge
2017

Infobeton Student contest 2017

ACI FRC Bowling Ball Competition



2018 FRC Bowling Ball Competition

LOCALLY WON COMPETITIONS

- Organized by the Belgian Concrete Society



Belgische BetonGroepering

- Title: No Mercy

Goal:

Produce two unreinforced concrete specimen which can resist a 6kN point load
>> be as light as possible.



LOCALLY WON COMPETITIONS

- The result:

Model 1 : a fla
a to



Infobeton Student contest 2016

2018 FRC Bowling Ball Competition

LOCALLY WON COMPETITIONS

Infobeton Student contest 2016

Ultimaker Education challenge
2017

Infobeton Student contest 2017

ACI FRC Bowling Ball Competition



2018 FRC Bowling Ball Competition

LOCALLY WON COMPETITIONS

Infobeton Student contest 2016



In recognition of the participant's commitment to educational innovation in the field of 3D print technology



Ultimaker Education challenge

2017

2018 FRC Bowling Ball Competition

LOCALLY WON COMPETITIONS

Infobeton Student contest 2016

Ultimaker Education challenge
2017

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2018 FRC Bowling Ball Competition

LOCALLY WON COMPETITIONS

Infobeton Student contest 2016

Ultimaker Education challenge

2017



Belgische BetonGroepering

■ Contest 2017:



- Goal: ‘make the perfect specimen’
the 2 unreinforced concrete specimens must have a weight of 10N and a strength of 10kN (3-point bending test)

Infobeton Student contest 2017

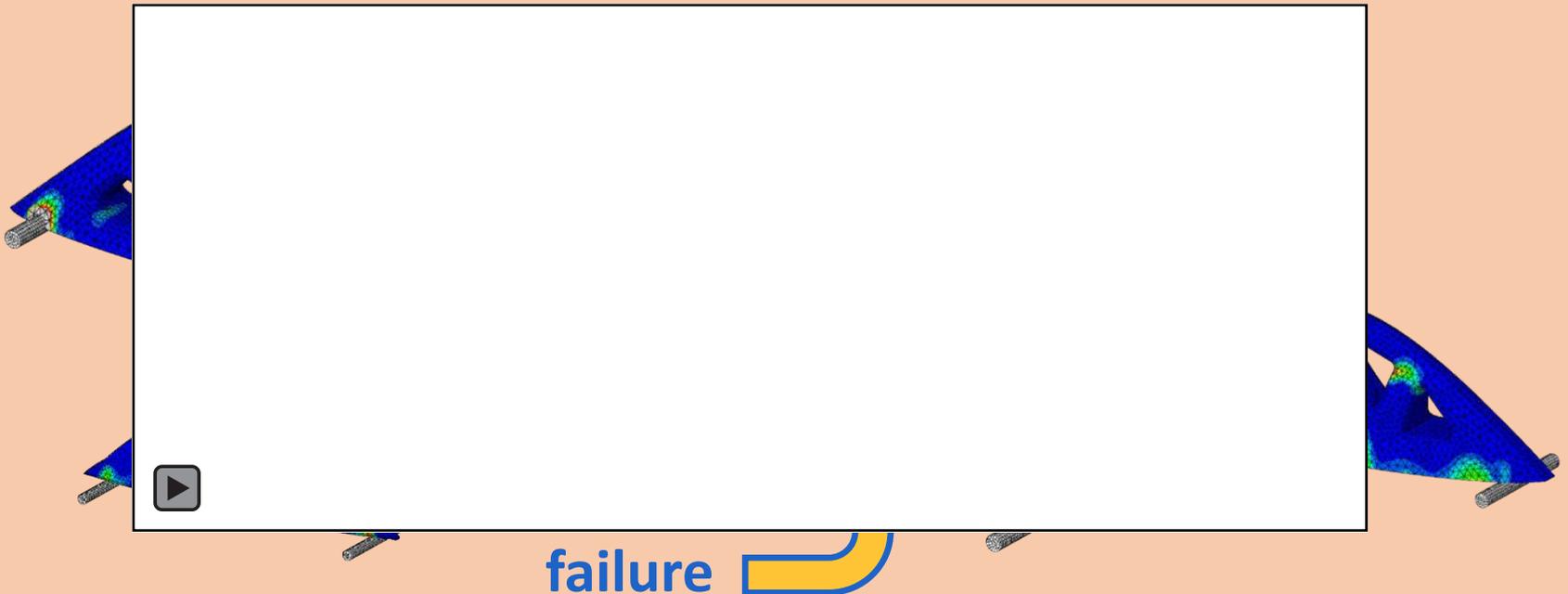
2018 FRC Bowling Ball Competition

LOCALLY WON COMPETITIONS

Infobeton Student contest 2016

Ultimaker Education challenge
2017

- Several 3D models were designed, and analyzed in Abaqus



Infobeton Student contest 2017

2018 FRC Bowling Ball Competition

LOCALLY WON COMPETITIONS

Infobeton Student contest 2016

Ultimaker Education challenge
2017

- Finalist



Infobeton Student contest 2017

2018 FRC Bowling Ball Competition

LOCALLY WON COMPETITIONS

Infobeton Student contest 2016

Ultimaker Education challenge
2017

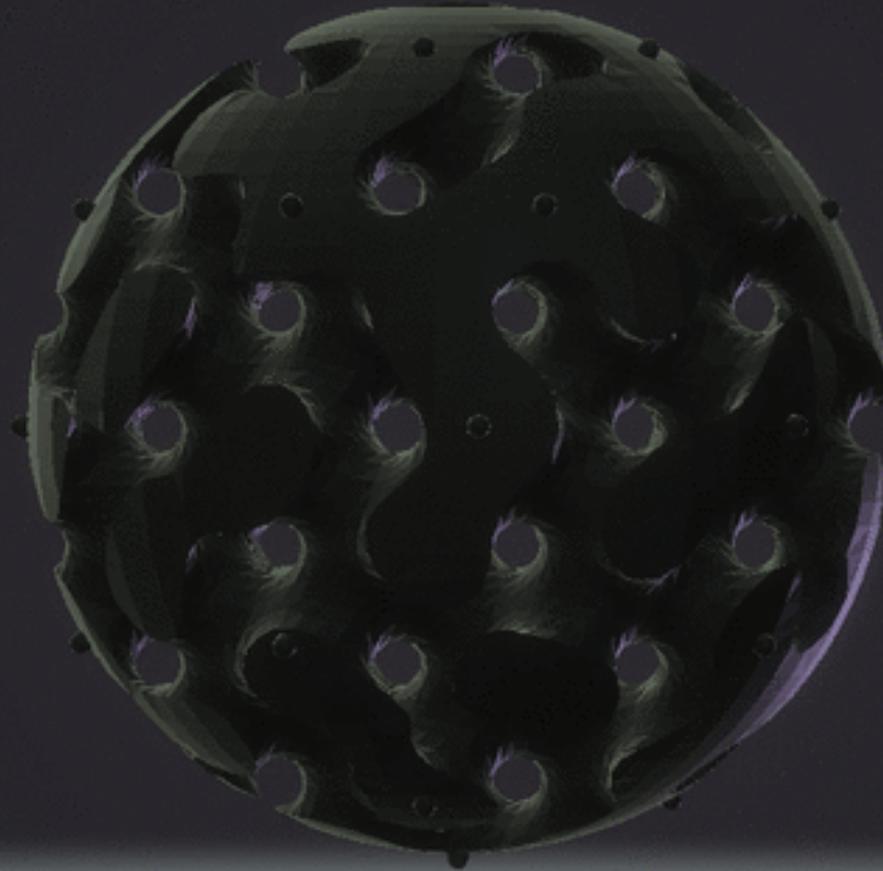
Infobeton Student contest 2017

ACI FRC Bowling Ball Competition

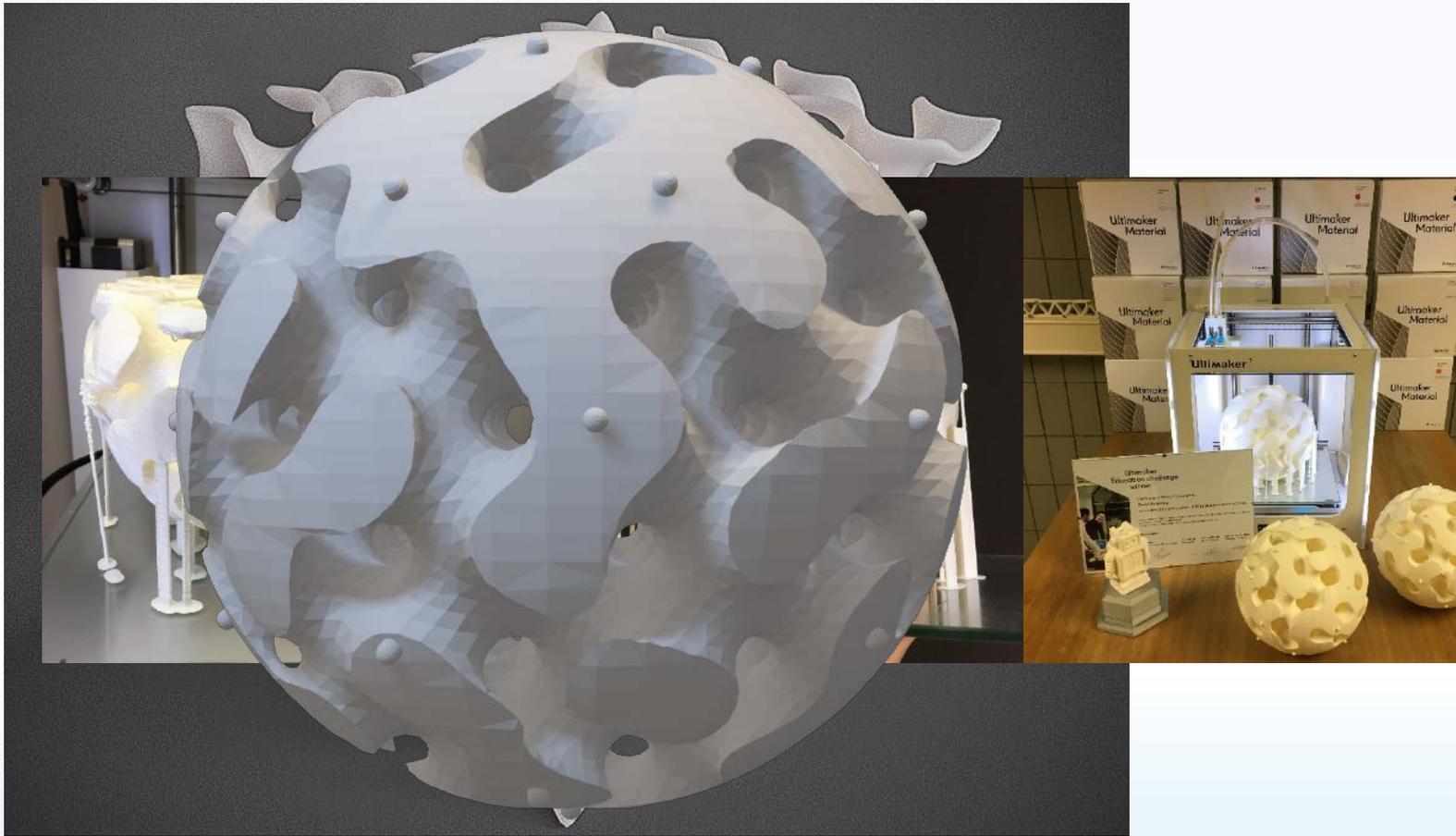


2018 FRC Bowling Ball Competition

ACI FRC Bowling Ball Competition



The gyroid



2018 FRC Bowling Ball Competition

The bowling ball



2018 FRC Bowling Ball Competition

Questions?



2018 FRC Bowling Ball Competition