

FINAL PROGRAM



2020

6 – 8 September 2020

KU LEUVEN

**University of Leuven – Ghent Campus
Ghent, Belgium**

Organized and Sponsored by



PROGRAM AT A GLANCE

September 6

16.00-17.30 Registration
16.00-18.00 Welcome Drink

September 7

08.00-17.00 Registration
09.00-09.15 Welcome address and Introduction to SCIFI-IT'2020
09.15-10.00 Keynote Speaker (Leonel Moura - ONLINE)
10.00-10.30 Coffee Break
10.30-12.30 Session (3 papers)
12.30-13.30 Lunch
13.30-15.00 Session (3 papers)
15.00-15.30 Coffee Break
15.30-16.30 Invited Speaker (Joel Colloc – ON-SITE)
16.30-18.00 Workshop
18.30-20.30 Social Event

September 8

09.00-17.00 Registration
09.00-10.00 Invited Speaker (Joseph Delappe - ONLINE)
10.00-10.30 Coffee Break
10.30-12.30 Workshop(3 presentations and question time)
12.30-13.30 Lunch
13.30-15.00 Session (3 papers)
15.00-15.30-Coffee Break
15.30-16.30 Session (1 paper)
16.30-16.45 Closing Session
16.45-17.30 Visit to the Brewery of the University of Leuven
19.30-23.00 Conference Dinner

SCIFI-IT'2020 is run in parallel with FOODSIM'2020

**Participants of SCIFI-IT'2020 are also free to attend
FOODSIM'2020 presentations and vice versa.**

SCIFI-IT'2020 FINAL PROGRAM

Overhead, LCD Projector and video screens are standard

The underlined authors are usually the presenters.

Conference Site: **Room M210, (Building M, 2nd Floor)**, [KU Leuven Technologicampus Gent](#), Gebroeders de Smetstraat , B-9000 Ghent. **The entrance to building M is via Building L.** The way to the event will be signposted. **(for building locations see map at the back of the programme)**

For any local information contact **Monika Polańska**: (✉ Email: monika.polanska@kuleuven.be)
General Phone Number and Email 📞 Tel. +32.9 265 86 10, ✉ Email: [iiw.gent@kuleuven.be](mailto:iw.gent@kuleuven.be)

Coffee breaks are served in the rooms and lunches are served in front of **Room L226, Building L, 2nd Floor.**

Only papers in gray boxes are eligible for the best paper award.

Papers designated ONL are presented online

Sunday, September 6, 2020

16.00 - 18.00	IN FRONT OF ROOM L-226 AND IN ROOM L226 BUILDING L, 2ND FLOOR
16.00 - 17.30	Registration SCIFI-IT'2020 – FOODSIM'2020
16.00 - 17.00	ROOM L226 - COST Virtual Committee Meeting
16.00 - 18.00	Welcome Drink in meeting space in front of ROOM L226

Monday, September 7, 2020

08.00 - 17.00	Registration SCIFI-IT'2020 – FOODSIM'2020
09.00 - 09.15	ROOM M210- WELCOME

Welcome Address

Monika Polanska, University of Leuven, Ghent Campus, Ghent, Belgium

Monday, September 7, 2020

09.15 - 10.00 ROOM M210 - SESSION I
KEYNOTE SPEAKER

09.15-10.00

Session Chairperson:

Monika Polanska, University of Leuven, Ghent Campus, Ghent, Belgium



SCIFI_KEY_01_ONL

The Rise of the Nonhuman

Leonel Moura, Lisbon, Portugal

10.00 - 10.30 Coffee Break

10.30 - 12.30 ROOM M210 - SESSION II
IMMERSIVE TECHNOLOGIES

10.30-12.30

Session Chairperson:

Pieter Jorissen, Karel de Grote University College, Hoboken, Belgium

SCIFI_MIL_01_INT

Lessons Learned and New Research Opportunities in Immersive Technologies for Defence Applications

Charles Hamesse, Jeroen Nelis, Rob Haelterman

and Salvatore Lo Bue 33

SCIFI_INT_01_HEALTH_AI

A Taxonomy of Contemporary Artificial Intelligence Techniques used in Virtual Reality Training and Simulations

Ivan De Boi and Pieter Jorissen 41

SCIFI_INT_02_ONL

UX Evaluation of VR Locomotion & Virtual Object Interaction Mechanics

Daniel P. O. Wiedemann, Peter Passmore and Magnus Moar 49

Monday, September 7, 2020

12.30 - 13.30 **Lunch – in meeting space in front of ROOM L226**

13.30 - 15.00 **ROOM M210 - SESSION III
HUMAN MACHINE INTERFACES**

13.30-15.00

Session Chairperson:

Cees Lanting, DATSA Belgium Consulting, Leuven

SCIFI_AI_02_ONL

Pragmatic Model for Human Role Definition in Mixed Intelligence Solutions

Anton Ivaschenko, Arkadiy Krivosheev and Tatiyana Nikiforova **19**

SCIFI_AI_04_ONL

Categorical Data as a *Stone Guest* in a Data Science Project for Predicting Defective Water Meters

Giovanni Delnevo, Marco Roccetti and Luca Casini **24**

SCIFI_DRIVE_01

An Attempt to Model Decision Processes for Time-Constrained Applications

Izabella V. Lokshina and Cees J.M. Lanting **27**

15.00 - 15.30 **Coffee Break**

15.30 - 16.30 **ROOM M210 - SESSION IV
INVITED SPEAKER**

15.30-16.30

Session Chairperson:

Cees Lanting, DATSA Belgium Consulting, Leuven



SCIFI_INV_01

[Artificial Thinking: A Multi-Agent System of Insight in a Stream of Perceptions?](#)

Joël Colloc..... **27**

Monday, September 7, 2020

16.30 - 18.00 ROOM M210 - SESSION V
WORKSHOP

16.30-18.00

Session Chairperson:

Pieter Jorissen, Karel de Grote University College, Hoboken,
Belgium

SCIFI_WORK_02

[Multi-Platform Medical Virtual Reality Training](#)

Ivan De Boi, Faculty of Applied Engineering, University of Antwerp,
Antwerp and Pieter Jorissen, Department of Industrial Sciences and
Technology, Karel de Grote University College, Hoboken, Belgium

18.30-20.00

SOCIAL EVENT (to be specified at the conference)

20.00

FREE EVENING

Tuesday, September 8, 2020

08.00 - 17.00 **Registration SCIFI-IT'2020 – FOODSIM'2020**

09.00 - 10.00 **ROOM M210 - SESSION VI
INVITED SPEAKER**

09.00-10.00 **Session Chairperson:**
Monika Polanska, University of Leuven, Ghent Campus, Ghent, Belgium



SCIFI_INV_02_ONL
Head Shot! Playing Politics in Computer Games
**Joseph DeLappe, Professor of Games and Tactical Media
Division of Games and Art, Abertay University, Dundee,
Scotland, United Kingdom**

10.00 - 10.30 **Coffee Break**

10.30 - 12.30 **ROOM M210 - SESSION VII
WORKSHOP**

10.30-12.30 **Session Chairperson:**
Cees Lanting, DATSA Belgium Consulting, Leuven

SCIFI_WORK_01
AI Decision taking and Ethics
Cees J.M. Lanting, DATSA Belgium Consulting, Leuven, and Erik Mannens, Ghent University-IMEC, Ghent, Belgium

12.30 - 13.30 **Lunch**

Tuesday, September 8, 2020

**13.30 - 15.00 ROOM M210 - SESSION VIII
FUTURE DATA MANAGEMENT AND INFRASTRUCTURE**

13.30-15.00

Session Chairperson:

Erik Mannens, Ghent University-IMEC, Ghent, Belgium

SCIFI_AI_01_ONL

The Barrier of Meaning in Archaeological Data Science

Luca Casini, Marco Rocchetti, Giovanni Delnevo, Nicolò Marchetti
and Valentina Orrù..... **61**

SCIFI_DAT_01_ONL

Recursive Decomposition Model for the Big Data Exchange

Anton Ivaschenko, Anastasia Stolbova and Alfiya Diyazitdinova **66**

SCIFI_HEALTH_01

**Using Wireless and Mobile Technologies in Healthcare on a Wide
Scale: The Issues and Challenges to surmount**

Izabella V. Lokshina and Cees J. M. Lanting **69**

15.00 - 15.30

Coffee Break

**15.30 - 16.30 ROOM M120 - SESSION IX
FUTURE FARMING AND FOOD PRODUCTION**

15.30-16.30

Session Chairperson:

Philippe Geril, ETI Bv, Ostend, Belgium

SCIFI_FARM_NEW

Food of the Future: Fantasy or Realistic Forecasts

Monika Polańska and Jan F.M. Van Impe..... **77**

Tuesday, September 8, 2020

16.30 - 16.45 **ROOM M120 - SESSION X**
CLOSING SESSION

16.30 - 16.45 **Session Chairperson:**
Philippe Geril, ETI Bv, Ostend, Belgium

16.45 – 17.30 **VISIT TO THE BREWERY OF LEUVEN UNIVERSITY AND SOME**
BEER TASTING IN BUILDING M

19.30 - 23.00


CONFERENCE DINNER



Brasserie de Foyer

Sint-Baafsplein 17

9000 Gent

 Tel: + 32.9 234 13 54

 Email: info@foyerntgent.be

Website: <http://foyerntgent.be>

SESSION CHAIR INFORMATION

Information for Session Chairs

Session Chairs are chosen on a voluntary basis by proposals by either authors or local committee members or are appointed by the Track Chairs, General Program Chair or General Conference Chair. They are responsible for their assigned session. They make sure their speakers are available, take care of the timing within the session, chair the discussion after each presentation and introduce each speaker based on the CV's given to them by the authors. In case they chair a session featuring **extended papers**, then they are required to distribute and collect the reviews of that or those papers at the beginning and end of the session. If they have time they should also indicate in their papers the number of session participants.



2021

SEE YOU ALL NEXT YEAR AT SCIFI-IT'2021
March –April 2021, Ghent, Belgium (TBC)

Proposals for special tracks/tutorials/demos can be sent in by OCTOBER 15th 2020

CONFERENCE LOCATION

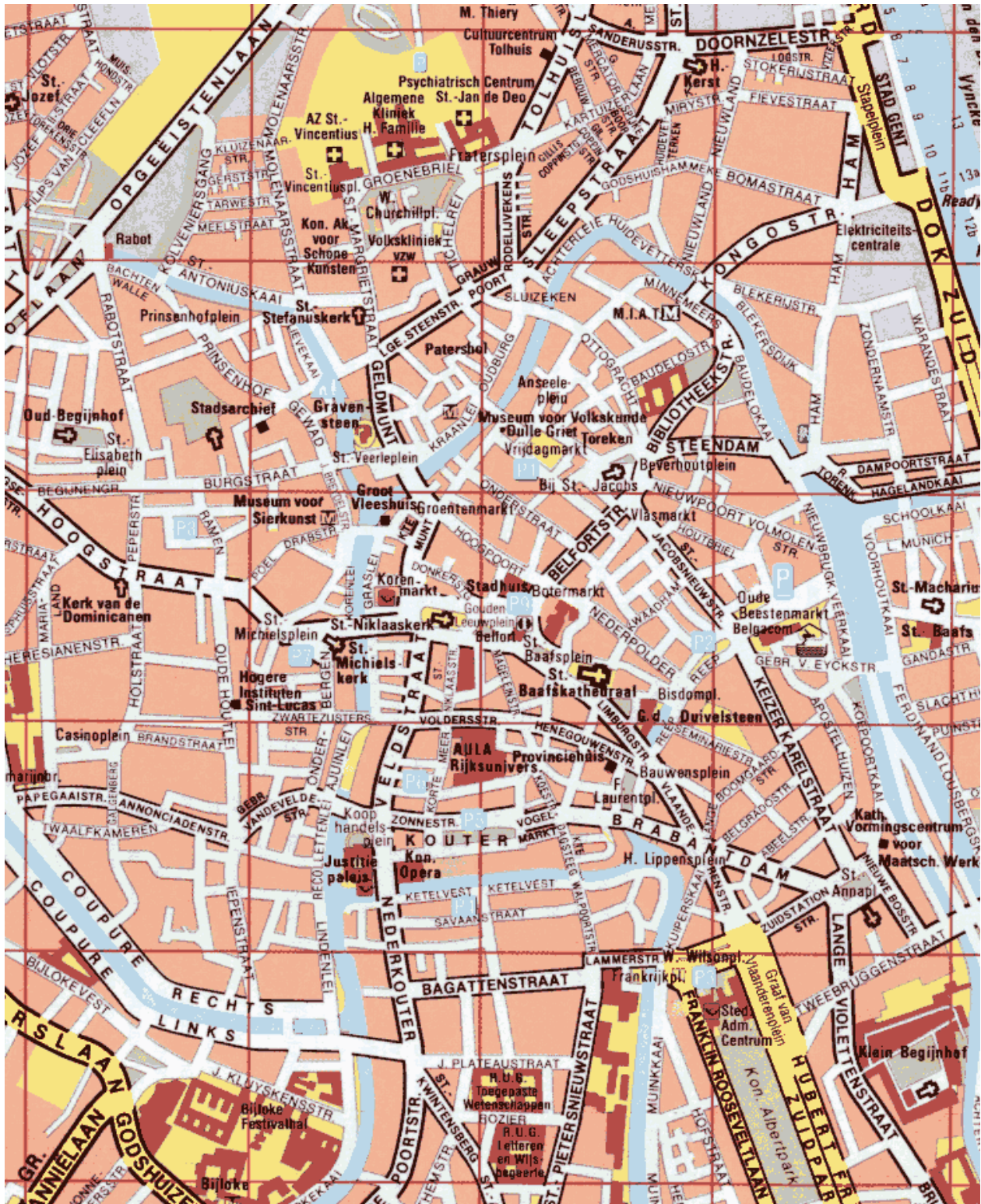
Conference Venue



Buildings M & L (see map below)
[KU Leuven Technologicampus Gent](https://www.kuleuven.be/technologiecampus)
Gebroeders de Smetstraat 1
B-9000 Ghent
Tel: +32.9 265 86 10



CONFERENCE LOCATION



THE CONFERENCE LOCATION IS ACROSS LEFT FROM THE TOP LEFT GRID WHERE YOU SEE RABOT

EUROSIS Forthcoming Conferences



[ESM'2020](#), October 21-23, 2020, [LAAS](#) Toulouse, France



[ISC'2021](#), June 2-4, 2021, [University of Malta](#), Valletta, Malta



[ESM'2021](#), October 2021, [Link Campus University](#), Rome, Italy

NOTES

SCIFI-IT'2020 At-Conference Registration Form

Please legibly print or type and fill out completely. (Check appropriate boxes where necessary)

FIRST NAME	LAST NAME	M.I.
COMPANY OR AFFILIATION		
Mailing address (tick one): <input type="checkbox"/> HOME <input type="checkbox"/> BUSINESS		
STREET		
CITY		
ZIPCODE	COUNTRY	
TELEPHONE	FAX	
E-MAIL		
DATE	SIGNATURE	
1. <input type="checkbox"/> EUROSIS member € 565 Member Number: _____		€ _____
2. <input type="checkbox"/> Members of Sponsor or Affiliate Society € 565		€ _____
3. <input type="checkbox"/> Non-Member Participant € 605		€ _____
4. <input type="checkbox"/> Student Participant € 440		€ _____
5. <input type="checkbox"/> Students, <u>who are not authors</u> but who wish to attend the conference, or ONE DAY PARTICIPANTS pay: € 440		€ _____
(Above registration fees include, one copy of the PROCEEDINGS, all midday meals, cocktail, refreshments, coffees and social program,) One Day Participants and Non-Author Students cannot participate in the conference dinner.		
6. <input type="checkbox"/> Tutorial registration ONLY - €30 (students) Or €80 (non students)/ per tutorial		€ _____
7. <input type="checkbox"/> Conference Dinner Ticket for Companion € 80 <input type="checkbox"/> Lunch Ticket for Companion € 25/day		€ _____
8. <input type="checkbox"/> Extra Conference Proceedings € 30 Cash and Carry		€ _____
VAT Number if applicable: _____		
TOTAL AMOUNT DUE		€ _____
<u>ADD 21% VAT (Value Added Tax) OBLIGATORY</u>		€ _____
TOTAL AMOUNT REMITTED		€ _____

[12) Pay by **CREDIT CARD** and fill in the information below:

Charge my (tick one): Visa Euro/Mastercard American Express

CARD NO: _____ : _____ : _____ : _____ EXP.DATE: ____ / ____

Authorizing Signature:

Print Signature in CAPITALS



EUROSIS was borne out of discussions with the European Community to set up a new kind of Society, which would be project driven instead of driven by pure membership and conferences.

The aim of the new Society is to set up topic related Technical Committees which link directly to European Projects in the field of computer simulation and related areas and to act as a knowledge pool for future HORIZON 2020 European Networks of Excellence, like MOSAIC.

If you would like to receive more information about EUROSIS, please contact

Philippe Geril
EUROSIS-ETI
European Simulation Office
Bluebridge – Ostend Science Park
Wetenschapspark 1
Plassendale 1
B- 8400 Ostend
Belgium
 **Tel: +32.59.255.330**
 **Email: Philippe.Geril@eurosis.org**

Please send me info on EUROSIS:

Name:.....
Address:.....
.....
.....
Telephone:
Fax:
Email: