

FSWP 2019

Louvain-la-Neuve, Belgium, 11-13 September 2019

Thank you to our sponsors



LE FONDS SOCIAL EUROPÉEN ET LA WALLONIE
INVESTISSENT DANS VOTRE AVENIR



WELCOME to Belgium !



A bit of history of the conference:

Jan. 2010: Lille, France

Jan. 2012: St Etienne, France

Jan. 2014: Nantes, France

Oct. 2015: San Sebastian, Spain

Oct. 2017: Metz, France

Sept. 2019: Louvain-la-Neuve, Belgium —————> 6th edition !

Initiated by the
mixed AFM-SF2M
FSW commission



This is a more and more successful event:

120 participants

Thank you all for trusting us to make this event a success!

Our scientific and organizing committees

SCIENTIFIC COMMITTEE

G. ABBA	Université de Lorraine (France)
E. ALDANONDO	IK4 LORTEK (Spain)
M-N. AVETTAND-FENOEL	UNIV. LILLE 1 (France)
A. BEN ATTAR	INSTITUT DE SOUDURE (France)
H.K.D.H. BHADSHIA	UNIV. CAMBRIDGE (UK)
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J. DE BACKER	TWI (UK)
J. DOS SANTOS	HELMHOLTZ-ZENTRUM GEESTHACHT (Germany)
L. DUBOURG	StirWeld (France)
A. ECHEVERRIA	IK4 LORTEK (Spain)
E. FEULVARCH	ENISE (France)
Ch. HERBELOT	UNIV. LILLE 1 (France)
A. IMAD	UNIV. LILLE 1 (France)
P.J. JACQUES	Université catholique de Louvain (UCLouvain)
J. LAYE	CONSTELLIUM (France)
F. MAAS	Belgian Welding Institute (Belgium)
F. MARIE	Ariane Group
E. MASSONI	CEMEF – Mines ParisTech (France)
R. MIRANDA	UNIDEMI, Universidade NOVA de LISBOA (Portugal)
K. NOR	GKN Aerospace Services
T. PARDOEN	Université catholique de Louvain (UCLouvain)

G. RACINEUX	GeM, EC NANTES (France)
D.M. RODRIGUES	UNIV. COIMBRA (Portugal)
F. SCANDELLA	INSTITUT DE SOUDURE (France)
R. TAILLARD	UNIV. LILLE 1 (France)

ORGANIZING COMMITTEE

A. SIMAR	Université catholique de Louvain (UCLouvain)
G. SANTOS	Université catholique de Louvain (UCLouvain)
F. HENDRICKX	CRM group

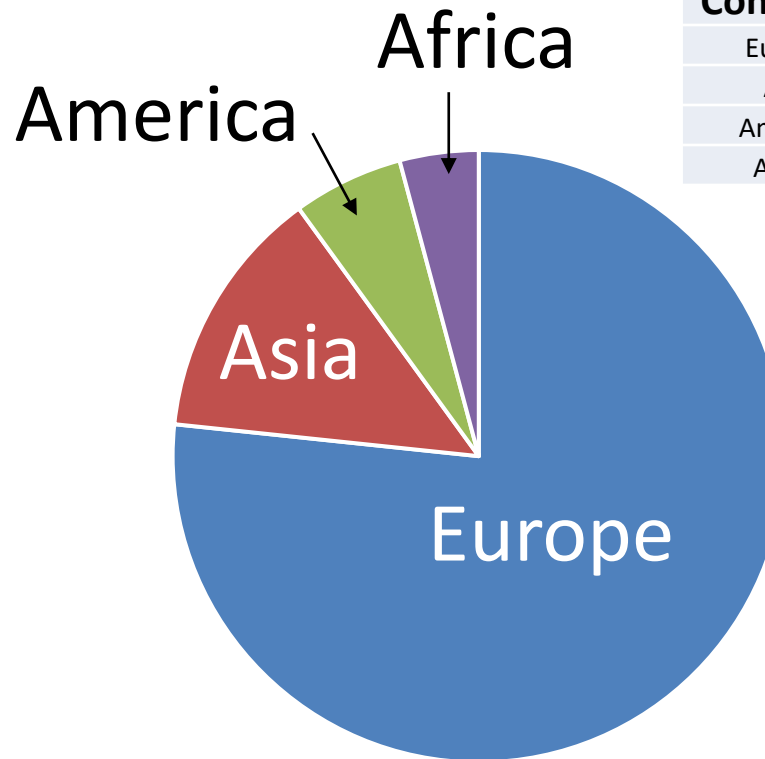


WELCOME to Belgium !



Origin of the participants:

Country	Participants
Belgium	22
France	22
Germany	17
Italy	8
Japan	8
Spain	5
United States	5
China	4
Portugal	4
Austria	3
Poland	3
United Kingdom	3
India	2
South Africa	2
Sweden	2
Algeria	1
Canada	1
Colombia	1
Ghana	1
Morocco	1
Netherlands	1
Russian federation	1
Slovenia	1
Taiwan	1
United Arab Emirates	1



Continent	Participants
Europe	92
Asia	16
America	7
Africa	5

Inspiring talks !



Sessions on Applications, process developments, FSP, FSSW, modelling, dissimilar welding, FSW of Al and steel

Please strictly respect your 20 minutes allocated time

Allow 3 minutes for question time

...and plenary lectures

- Development and industrialization of FSW for Ariane 6 propellant tanks
François MARIE (Ariane Group) and **Markus KAHNERT** (MT-Aerospace)
- Friction stir processing - an effective tool for fabricating high-property nano-carbon reinforced aluminium alloy composites
Zongyi MA (Chinese Academy of Sciences)
- Numerical framework for high accuracy simulation of the FSW process
Michele CHIUMENTI (Universidad Politécnic de Cataluña)

...and posters (special session of 2 min presentation on Thursday at 3:30pm)

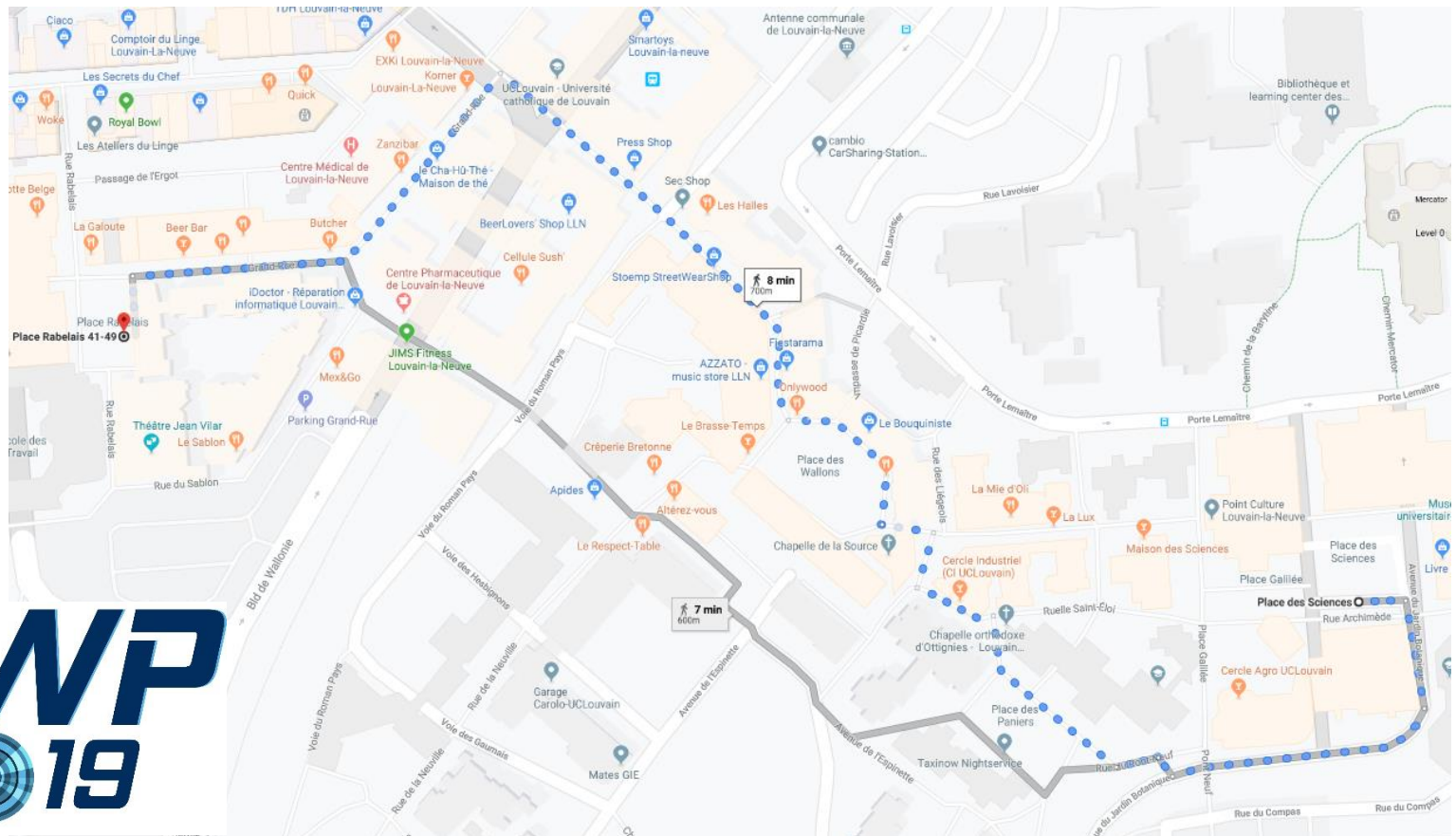
Lunches at “Fleur de Sel”

Today and Thursday at 12:30

Follow the UCLouvain members

Place Rabelais 49
1348 Louvain-la-Neuve
Belgium

About 8 minutes walking



Visit of UCLouvain facilities and FSW machine demonstration

Today from 5:30pm



FSW machine from Tra-C industrie with demonstration



AM machines



Please **register** at the entrance desk for a scheduled visit
Visits will depart from entrance hall of “Science” building

Short presentations of our sponsors



Thursday from 3:10pm



LE FONDS SOCIAL EUROPÉEN ET LA WALLONIE INVESTISSENT DANS VOTRE AVENIR

Followed by short poster presentations and exhibition

Exhibition

Anytime during breaks but special time Thursday from 3:40pm



Zwick / Roell



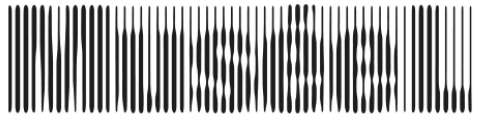
VISIT of the Small Brewery or of Musée L from 5:10 pm on Thursday

Gathering in the hall of the “Science” Building after the
poster and exhibition session

Visit of the Brewery «Brasse-temps» (maximum 50 people, fully booked)



Guided visit of the Museum of Louvain-
la-Neuve (still availabilities, see desk)



Musée
universitaire
de Louvain



* Registration for these activities was compulsory upon
conference registration, please see the entrance desk if
you cannot remember to which you registered

CONFERENCE DINER

from 7:30 pm on Thursday



Meet us at Martin's Hotel, near "Grand Place"

Address:

Rue de l'Hocaille, 1

1348 Louvain-la-Neuve

(visible from "Grand Place"
and the cinema)

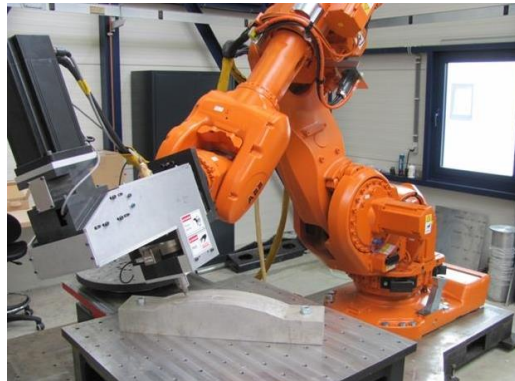


Visit to CRM on Friday pm (site CEWAC)



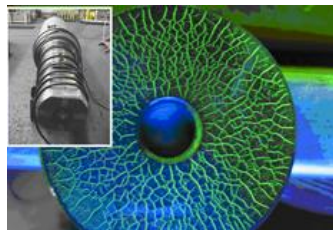
- Welding facilities (30')

- Friction stir (CNC and robot) & rotation friction welding
- Electron beam welding, laser welding & hybrid laser-GMAW
- Resistance spot welding etc.
- Wire Arc Additive manufacturing (WAAM)
- *Demo FSW*



- Non-destructive testing facilities (15')

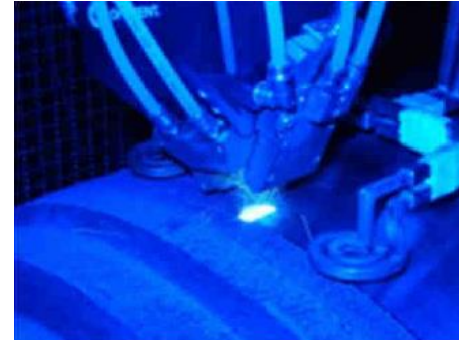
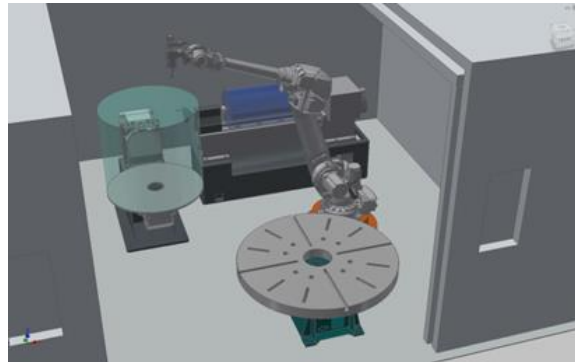
- VT, PT, MT, UT, RT & tomography
- *Demo, examples of indications etc.*



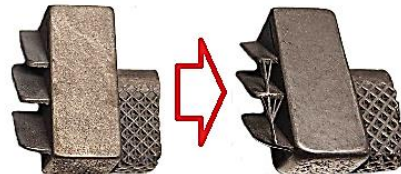
Visit to CRM on Friday pm (site PIMW)



- **Additive Manufacturing facilities (30')**
 - Large robotic AM cell and smaller CNC AM machine based on laser & wire/powder
 - Laser cladding presentation
 - *Demo on one of the machines*



- **Post-processing facilities/examples (15')**
 - Surface treatments eg. tribo-finishing, electro- & chemical polishing ...
 - *Show examples of (AM) parts that have been processed*



Visit to CRM on Friday pm

Practicals



We cannot take any unregistered people, sorry! If you find someone that cancels we would be glad to have you join.

Lunch on Friday is a sandwich lunch NOT OUTSIDE
in the « Science » building

At 12:50pm on Friday

gather in front of the building and walk to the 2 buses

After the visit (about 4:10pm) you can:

- Take the bus back to **Liège train station** that is directly connected to Brussels train stations and Brussels airport train station
- Take the bus back to **Louvain-la-Neuve** (about 17:30)

Please inform us if you are not planning to take the bus but use your own car



Suggested visit in Louvain-la-Neuve



Museum Hergé

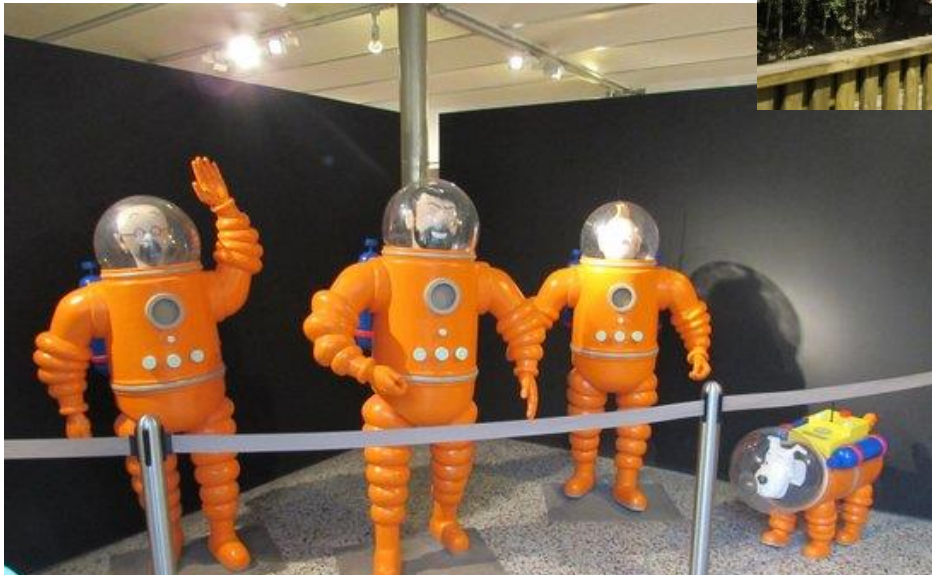
The father of the comics Tintin

2 minutes walking from the Grand Place of Louvain-la-Neuve

Open

Weekdays: 10:30-17:30

Weekend: 10:00-18:00



Suggested visit in Brussels (45 min by train)



The Grand Place of Brussels



The Atomium



A giant cubic
centered
lattice unit !

The Royal Palace



The European Parliament

