

Florence 26-30 August, 2018

IEA 2018

Final Report



Sara Albolino and Riccardo Tartaglia
Chairs IEA 2018



PROVINCIA
DI FIRENZE

REGIONE
TOSCANA



FIRENZE
CONVENTION BUREAU



PARTICIPANTS

Total Registered Participants **1576**

Participants from Federated societies n. **533**

Students n **428** : **176** from LMIC (72 free), **252** from HIC

ATTENDEES BY CONTINENTS

52 %(828) Europe - 12% (193) Italy,

12 % (183) Latin America,

11 % (167) North America,

20 % (315) Asia

2 % (18) Africa

4 % (65) Oceania

n. **68** Countries

PARTICIPANTS BY COUNTRY

Algeria 5
American Samoa 2
Argentina 12
Armenia 1
Australia 52
Austria 12
Bangladesh 2
Belgium 29
Bolivia 1
Bosnia-Herzegovina 2
Brazil 92
British India Ocean Territory 1
Bulgaria 2
Canada 42
Chile 19
China 39
Colombia 24
Croatia 1
Czech Rep 3
Denmark 23
Ecuador 4
Estonia 2

Finland 16
France 115
Germany 107
Greece 8
Hong Kong 4
Hungary 3
India 25
Indonesia 3
Iran 14
Iraq 1
Ireland 4
Israel 13
Italy 193
Jamaica 1
Japan 102
Korea South 44
Latvia 3
Lebanon 2
Malaysia 8
Malta 1
Mexico 25
Mongolia 1

Netherlands 48
New Zeland 13
Nigeria 1
Norway 14
Peru 5
Philippines 5
Poland 9
Portugal 18
Romania 1
Russian Federation 5
Saudi Arabia 1
Serbia 1
Singapore 9
Slovenia 4
South Africa 11
Spain 10
Sweden 71
Switzerland 23
Taiwan 46
Turkey 8
United Kingdom 45
United states Minor Outlying Islands 1
USA 122
No nationality 36

SCIENTIFIC CONTRIBUTIONS

140 registered special sessions, symposia, workshop

45 Special Session 59 Symposia 36 (registered) Workshop
17 (attivati) Workshop

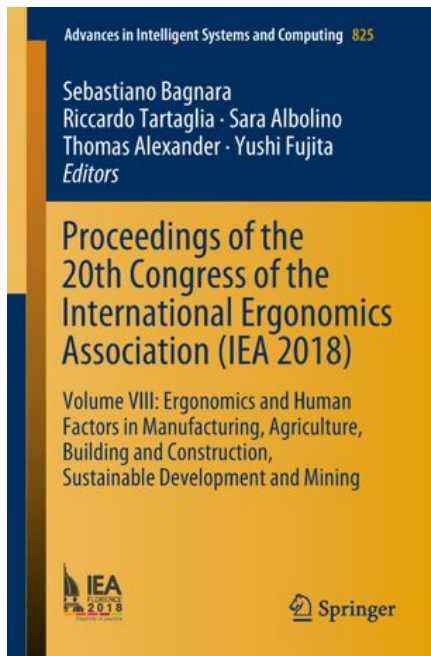
1689 Accepted Abstracts (860 oral+ 411 poster/video)

Abstracts submitted from 68 different countries

73 (4%) Not accepted

PUBLICATIONS

1012 published papers in proceedings



1. [Proceedings of the 20th Congress of the International Ergonomics Association \(IEA 2018\)](#)
Volume I: Healthcare Ergonomics
2. [Proceedings of the 20th Congress of the International Ergonomics Association \(IEA 2018\)](#)
Volume II: Safety and Health, Slips, Trips and Falls
3. [Proceedings of the 20th Congress of the International Ergonomics Association \(IEA 2018\)](#)
Volume III: Musculoskeletal Disorders
4. [Proceedings of the 20th Congress of the International Ergonomics Association \(IEA 2018\)](#)
Volume IV: Organizational Design and Management (ODAM), Professional Affairs, Forensic
5. [Proceedings of the 20th Congress of the International Ergonomics Association \(IEA 2018\)](#)
Volume V: Human Simulation and Virtual Environments, Work With Computing Systems (WWCS), Process Control
6. [Proceedings of the 20th Congress of the International Ergonomics Association \(IEA 2018\)](#)
Volume VI: Transport Ergonomics and Human Factors (TEHF), Aerospace Human Factors and Ergonomics
7. [Proceedings of the 20th Congress of the International Ergonomics Association \(IEA 2018\)](#)
Volume VIII: Ergonomics and Human Factors in Manufacturing, Agriculture, Building and Construction, Sustainable Development and Mining
8. [Proceedings of the 20th Congress of the International Ergonomics Association \(IEA 2018\)](#)
Volume IX: Aging, Gender and Work, Anthropometry, Ergonomics for Children and Educational Environments
9. [Proceedings of the 20th Congress of the International Ergonomics Association \(IEA 2018\)](#)
Volume X: Auditory and Vocal Ergonomics, Visual Ergonomics, Psychophysiology in Ergonomics, Ergonomics in Advanced Imaging

Some significant numbers (5)

Topic	oral presentation	special session	symposia	poster	paper
Ergonomics in Design	84	22	18	16	140
Musculoskeletal Disorders	42	26		30	98
Healthcare Ergonomics	56	7		32	95
Safety & Health	41	14	1	32	88
Organizational Design and Management	40	22	11	5	78
Transport Ergonomics and Human Factors (TEHF)	38	2		16	56
Human Factors and Sustainable Development	20	22		6	48
Human Simulation and Virtual Environments	32	3		5	40
Ergonomics in Manufacturing	28	3		8	39
Ergonomics in Design for All	25	5		7	37
Work With Computing Systems - WWCS	14	19		3	36
Activity Theories for Work Analysis and Design	21	9	4	1	35
Aging	15	3	1	6	25
Anthropometry	17	4		2	23
Psychophysiology in Ergonomics	11	7		4	22
Ergonomics for Children and Educational Environments	18			3	21
Gender & Work	3	5	7	3	18
Visual Ergonomics	14			4	18
Building and Construction	11			6	17
Slips, Trips and Falls	13			1	14
Professional Affairs		4	7		11
Affective Design	10				10
Agriculture	5			4	9
Advanced Imaging	3		2	1	6
Auditory and Vocal Ergonomics	6				6
Forensic in Human Factor				6	6
Process control	5	1			6
Aerospace	5				5
Mining	2			3	5
Total	579	178	51	204	1012

Technical domains –
committees
with more than
30 papers

Economics at glance (provisional)

Total costs of the conference **€ 849.943,90**

Total revenue of the conference **€ 853.408,21**

Revenue from sponsors **€ 194.390,00**

Revenue from registrations **€ 659.018,21**

Income from registrations for IEA **€ 22.035,00**

(801 full registration - € 20.025) – (134 reduced fee - € 2.010)

(Students, reduced fees, and free registrations – they are a cost for IEA2018)

Profit for IEA TBD according to the final budget

Seed fund for IEA **30.000 \$**

Total income for SIE **€ 8.814,00**

Special issues with selected contributions and peer review

Ergonomics Journal (IF 1.81)

Applied Ergonomics Journal (IF 2.43)

Journal of Human Factors (IF 2.37)

Journal of Internal and Emergency

Medicine (IF 2.45)

Work (IF 0.40)



The IEA2018 Journey

2018

- **Human Factors and Ergonomics in Health Care (USA)**
- **SwissErgo 20 years Day in Switzerland**

2017

ISQua's 34th International Conference

- **Human Factors and Ergonomics Society Annual Meeting (USA)**
- **Human Factors & Ergonomics Society of Australia conference. Sustainable Ergonomics**
- **49° CONGRESS SIBioC - Laboratory Medicine and clinical practice: from present to the future**
- **52° Congrès de la SELF. Présent et futur de l'Ergonomie**
- **7° Congreso Internacional de Ergonomia y Psicologia Aplicada**
- **7° Congreso Internacional de Ergonomia “Encuentro Iberoamericano de Ergonomia” and seminars in Latin America**
- **13° Ergonomics Society of South Africa Conference (ESSA2017) and ErgoAfrica Conference**
- **HFESS Seminar in Singapore and ULAERGO seminar in Chile and in Argentina**
- **Brussels FEES ETUI Joint meeting**
- **GfA Annual Congress in Germany**
- **ACED Conference in Japan**
- **AHFE Conference**

TC	response	solution found	abstracts
Activity Theories for Work Analysis and Design	support		49
Aerospace HFE	support		22
Affective Design	no support	other experts of the field	15
Aging	support		39
Agriculture	no support	other experts of the field	15
Anthropometry	support		30
Auditory Ergonomics	no support	TC Anthropometry	12
Building and Construction	support		24
Ergonomics for Children and Educational Environments	no support	other experts of the field	51
Ergonomics in Advanced Imaging	no support	other experts of the field	9
Ergonomics in Design	no support	other experts of the field	165
Ergonomics in Design for All (EinDfA)	support		56
Ergonomics in Manufacturing	no support	other experts of the field	65
Gender and Work	support		45
Healthcare Ergonomics	support		153

Human Factors and Sustainable Development	support		56
Human Simulation and Virtual Environments	support		58
Mining	no support	other experts of the field	1
Musculoskeletal Disorders	support		205
Organizational Design and Management	support		103
Process Control (Emeritus)	no support	other experts of the field	10
Psychophysiology in Ergonomics	no support	other experts of the field	33
Safety & Health	no support	TC Healthcare Ergonomics	144
Slips, Trips and Falls	support		33
Transport Ergonomics and Human Factors (TEHF)	no support	TC ODAM	79
Visual Ergonomics	support		33
Work With Computing Systems - WWCS	support		34

Reviewers from TCs (3)

topic	referees (mostly chosen by TC)	status activity
1.Activity Theories for Work Analysis and Design	6	
2.Aerospace Human Factors and Ergonomics	3	
3.Affective Design	8	
4.Aging	10	
5.Agriculture	1	
6.Anthropometry	15	
7.Auditory and Vocal Ergonomics	4	
8.Building and Construction	4	
9.Ergonomics for Children and Educational Environments	4	TC inactive
10.Ergonomics in Advanced Imaging	7	TC inactive
11.Ergonomics in Design	20	TC inactive
12.Ergonomics in Design for All	9	
13.Ergonomics in Manufacturing	5	
14.Gender and Work	3	
15.Healthcare Ergonomics	42	
16.Human Factors and Sustainable Development	15	
17.Human Simulation and Virtual Environments	42	
18.Mining	2	TC inactive
19.Musculoskeletal Disorders	17	
20.Organizational Design and Management	71	
21.Process Control	0	TC inactive
22.Psychophysiology in Ergonomics	0	TC inactive
23.Safety & Health	35	TC inactive
24.Slips, Trips and Falls	6	
25.Transport Ergonomics and Human Factors (TEHF)	53	TC inactive
26.Visual Ergonomics	6	
27.Work With Computing Systems - WWCS	11	
results	399	One third of TC were inactive

- Special offer for the federated societies:
Every 10 people registered one is free
- Special prices for accommodation for LMIC
- Free registration and accommodation for students from LMCI who submit an abstract (77)

TOPICS Productive Sectors and Services

- Manufacturing
- ICT
- Robotics
- Aerospace
- Agriculture
- Healthcare
- Building and Construction
- Mining
- Transport
- Automotive
- Military and Security
- Architecture
- Banking and insurance
- Advanced Imaging
- Sports Entertainment and Leisure
- Fashion
- Education and Training
- Cultural Heritage and Tourism
- Urban and Rural Planning

HFE Domains

HFE Domains

HFE Domains

Sponsors

Ad hoc initiatives with companies for creating a relationship and retention



2 plenary sessions for day: keynote speakers and discussant
Artese Show
Ergonomics in the future world
Visual abstracts
Ergonomics stories



Plenary sessions Keynote speakers

DAY1 – 26/08 afternoon

Healthcare Ergonomics

CARAYON PASCALE - comments by WESTBROOK J.

Innovation in healthcare

BRAITHWAITE JEFFREY - comments by: COSTA GIOVANNI

DAY2 - 27/08 morning

Agriculture

ABRAHAO ROBERTO FUNES – comments by Rosecrance John

Sustainability and Ecology

THATCHER ANDREW – comments by Pierre Falzon

DAY2 - 27/08 afternoon

Cognitive Design

KIRSH DAVID– comments by: PACI DALO' ROBERTO

Manufacturing

OCCHIPINTI ENRICO – comments by: ROSAL GUSTAVO

DAY3 – 28/08 morning

Resilience

HOLLNAGEL ERIK – comments by: CHIALASTRI ANTONIO

Aerospace

KHOLI SAMIR - comments by: CHIALASTRI ANTONIO

DAY3 – 28/08 afternoon

Design

JENKINS DANIEL – comments by: HIGNETT SUE

Interaction design

CHAPMAN LORRAINE– comments by: PERLA GIANNI

DAY4 – 29/08 morning

Quality in healthcare

PETER LACHMAN– comments by: FRANCESCO VENNERI

Defence and pace keeping

MAJUMDAR DHURJATI– comments by: TODD ANDREW

DAY4 – 29/08 afternoon

Art and Museums

Patrizia Asproni

Manufacturing

STRIANO – comments by: COLOMBNI DANIELA

DAYS – 30/08 morning

HFE

WALDEMAR KARWOSWSKY – comments by: BOY GUY

Robotics

BERGAMASCO MASSIMO – comments by: Patrizia Marti

- ERGONOMICS IN THE FUTURE WORLD: Challenges and Opportunities for the HFE Practitioner & Researcher in Cultural Contexts Worldwide”
- This track is meant to be used by the **federation of national societies and regional networks** (FEES – ULAERGO – ERGOAFRICA – SEANES – BRICS - ACED, etc) to embrace a common cultural ground in order to elicit the state of the art of ergonomics and **to inform the closing session “future of human factors and ergonomics”**
- Each one of the 17 clusters (see attached file) will have a liaison person appointed by the national societies

Each cluster of national societies is asked to discuss and to answer the following questions:

What are the most promising opportunities for RESEARCH & DEVELOPMENT in HFE?

What is needed to make HFE PRACTICE more actionable/operational on the field level?

What are the needs to be included in HFE initial & professional TRAINING?

What is the contribution of HFE to the future of work?

ERGONOMICS IN THE FUTURE WORLD: Challenges and Opportunities for the HFE Practitioner & Researcher in Cultural Contexts Worldwide

Network of societies Leading	Cluster of Societies Participating
<ul style="list-style-type: none"> • FEES 	<ul style="list-style-type: none"> • Cluster north mediterranean countries • Cluster French speaking countries • Cluster English speaking European countries • Cluster German speaking countries • Eastern Europe countries
<ul style="list-style-type: none"> • NORDIC ERGONOMICS AND HUMAN FACTORS SOCIETY and LATVIA 	<ul style="list-style-type: none"> • Cluster\EU Nordic and Baltic Sea
<ul style="list-style-type: none"> • AHFE +ACE 	<ul style="list-style-type: none"> • Cluster\ NA
<ul style="list-style-type: none"> • Australia and New Zealand 	<ul style="list-style-type: none"> • Cluster \ Southern Cross
<ul style="list-style-type: none"> • SEANES/ACED/ Asia 	<ul style="list-style-type: none"> • Cluster \ ASIA-SEANES\ ACED
<ul style="list-style-type: none"> • ULAERGO 	<ul style="list-style-type: none"> • Cluster Latin cultures/ ULAERGO
<ul style="list-style-type: none"> • BRICS + 	<ul style="list-style-type: none"> • cluster \BRICS
<ul style="list-style-type: none"> • ERGOAFRICA 	<ul style="list-style-type: none"> • cluster AFRICA

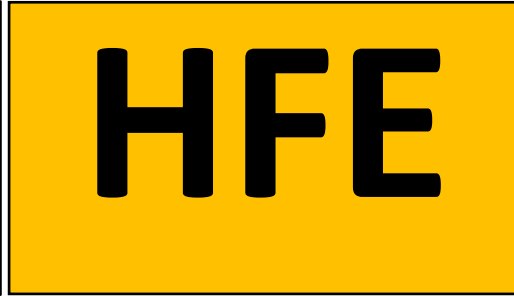
Video Abstract



N. 40 Visual abstract

How does your research look like from «the field»?
Research seen from the user perspective
Video showing the effect/reaction/need of your research





Special session
coordinated by Ernst
Stories and History of
Human Factors



An Attempt To Study The Evolution Of French-speaking Ergonomics

Ergonomics at 60

Montessori discover of ergonomics

Ergonomics and design in Brazil: The ergonomic concept of Itiro Iida

Technological constraints related to the practice of parathetism launches: Performance and Prevention of Work related musculoskeletal disorder.

31st August 2018

International Meeting
Florence 31 August – 1 September 2018

Patient safety for new medical generation

Promoting human factors culture in young medical doctors



Organized by:



In collaboration with:



9.00-9.45
Opening Addresses_Open Plenary

Riccardo Tartaglia, Director Centre GRC Tuscany Region
Yushi Fujita, IEA President

Sir Liam Donaldson, School of public health, London and WHO

Neelam Dhingra, Unit for Patient Safety and Risk Assessment, WHO
Sara Albolino, WHO Collaborating Centre on Human Factors and Communication

9.45-10.15
Welcome

Mayor of Florence
Councillor of Health Tuscany Region
Rectors of the universities of the Tuscany Region
President FNOMCeO

10.15-11.15
Lectures

Chairs Tommaso Bellandi, Center GRC- WHO Collaborating Centre
Kathleen L. Mosier, San Francisco State University

Giuseppe Remuzzi, Istituto Mario Negri
Pascale Cayon, College of Engineering, University of Wisconsin-Madison

11.15-11.30
Break

11.30-12.30
Lectures

Peter Lachman, International Society for Quality in Healthcare (ISQua)
Susan Sheridan, Society to Improve Diagnosis in Medicine

12.30-13.30
Delegates of residents

Chairs International delegate (TBD)

Delegates introduce themselves and present their expectation
on the future of patient safety

Closing remarks
Riccardo Tartaglia, Director Centre GRC Tuscany Region
Yushi Fujita, President of IEA

14.30-18.30
The future of patient safety
Session dedicated to invited delegates
Working groups

Chairs Neelam Dhingra, WHO
Giulia Dagliana and Michela Tanzini, Center GRC- WHO Collaborating Centre



Opening session with Multi-sensorial show:
music, light and perfum by Antonio Artese piano player

Social dinner in Botanic Garden and after dancing with an
Italian band

Social tours and special tourist experiences



Welcome



Important dates

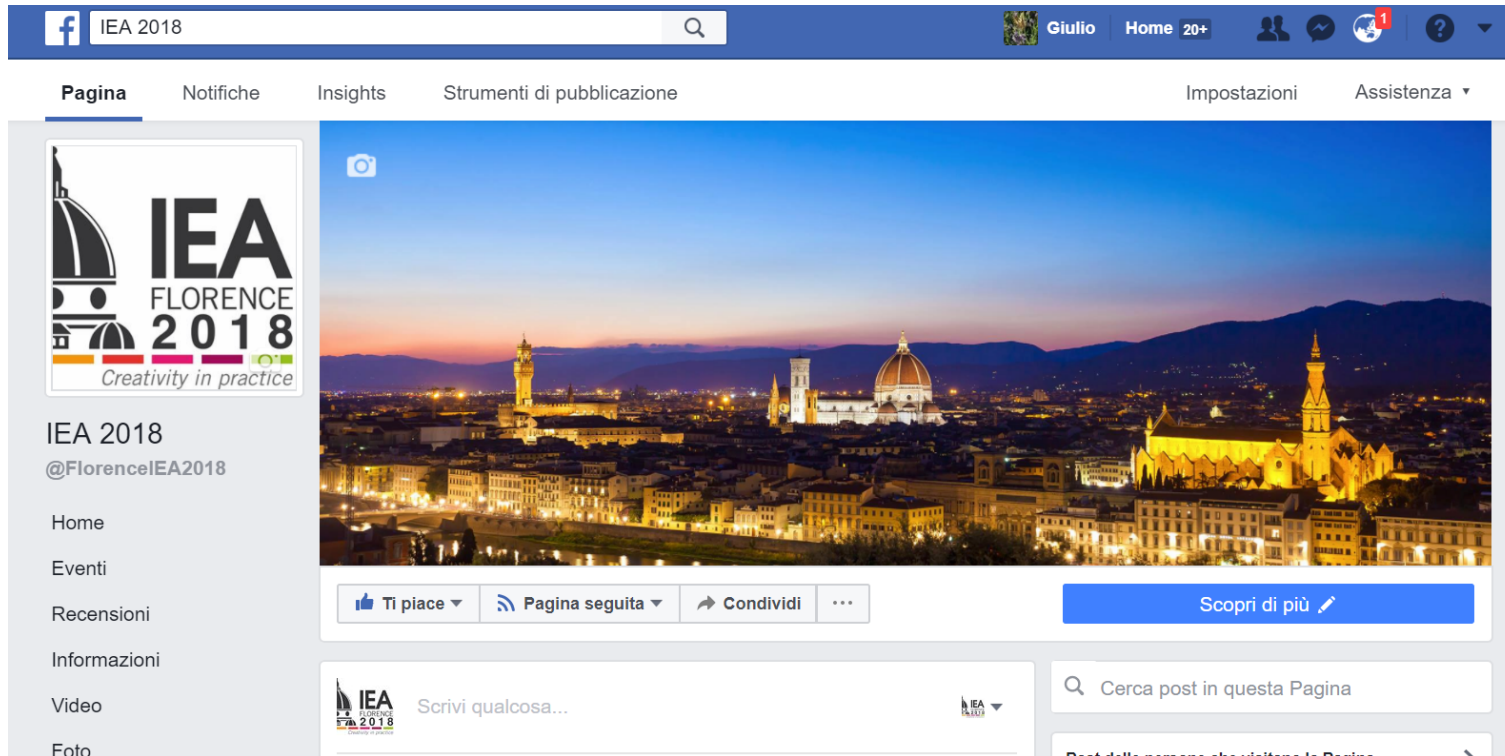


Special Interest Form



NOT ENOUGH GOOD FROM THE ERGONOMIC POINT OF VIEW

Creativity in Practice



The screenshot shows the Facebook profile page for IEA 2018. The top navigation bar includes the Facebook logo, a search bar with "IEA 2018", and user profile information for "Giulio" with "Home 20+" and notification icons. The main navigation menu includes "Pagina", "Notifiche", "Insights", "Strumenti di pubblicazione", "Impostazioni", and "Assistenza". The profile picture is the IEA FLORENCE 2018 logo. The cover photo is a night view of the Florence skyline with the Duomo illuminated. Below the cover photo are interaction buttons: "Ti piace", "Pagina seguita", "Condividi", and "Scopri di più". A search bar for posts on the page is visible below the cover photo.



[IEA 2018](#)



Active



IEA 2018
@FlorenceIEA2018

- Home
- Eventi
- Recensioni
- Informazioni
- Video
- Foto
- Post
- Community
- Promuovi**
- Gestisci le promozioni



Ti piace Pagina seguita Condividi

IEA FLORENCE 2018 Scrivi qualcosa...

- Condividi una foto o un video
- Pubblicizza la tua azienda
- Crea un'offerta
- Inizia un video in diretta
- Fai in modo che le persone scoprano di più
- Crea un evento
- Scrivi una nota
- Crea un sondaggio

Questa settimana

134 ↑ Copertura post | 2 Scopri di più | 42 ↑ Interazioni con i post

Use the Facebook page to amplify
The information produced by
the main web site
www.iea2018.org

- Registered participants
- Key note info
- Promotional video
- Updates on program
- Updates on events**

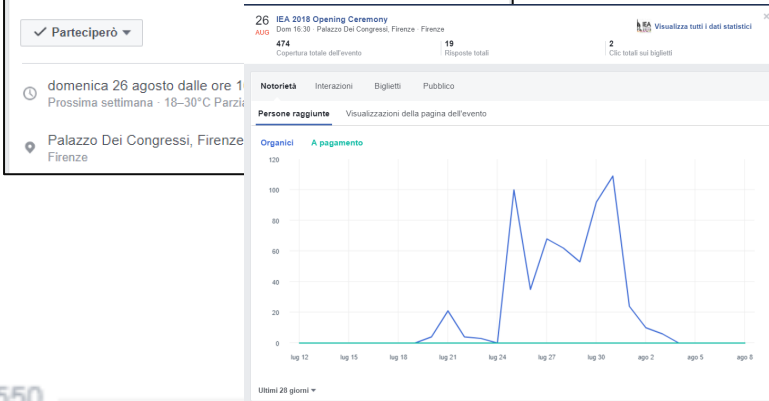
- The interactions with the IEA 2018 facebook page increased constantly. The first peak was registred after the post on number of abstract submitted
- The most followed post was the conference program scoring **1200 views**
- The post regarding the opening cerimony had 470 views

Continuous Growth of Page Follower

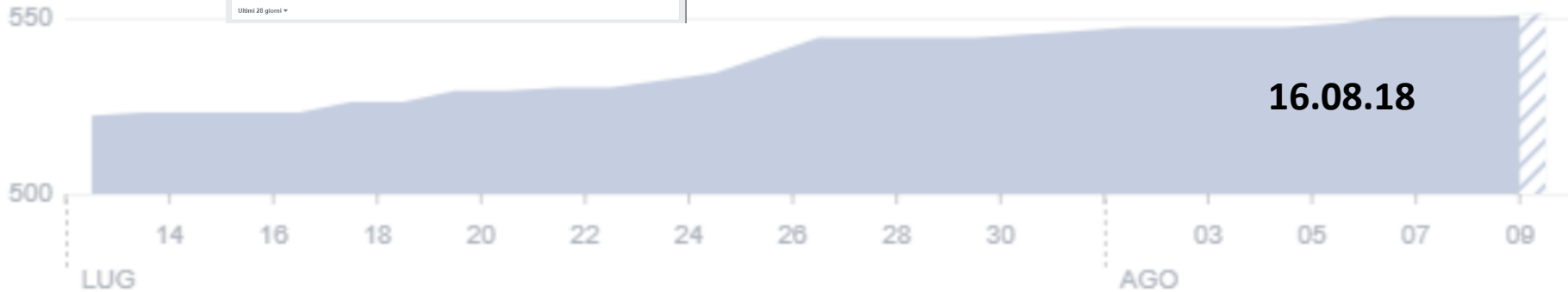
On 1° of August launch of EVENTS section

470

Views: Opening ceremony event



605
Page
follower



Data pubblicazione	Post	Tipo	Destinatari	Copertura	Interazioni
30/07/2018 11:53	Do you agree? attend IEA			568	39 25
29/07/2018 22:02	Attend IEA 2018:			485	16 22
27/07/2018 17:37	IEA 2018 Congress is			699	17 35
27/07/2018 10:01				183	12 3
26/07/2018 19:00	IEA Congress joins Food for			413	12 12
25/07/2018 17:34	Check on the website for			647	76 33
23/07/2018 17:19	Did you know? You could have			714	62 59
20/07/2018 17:01	Synchronize your watches...			800	45 43
18/07/2018 16:22	Social Dinner, August 28th			436	51 28
17/07/2018 23:49	The Full Conference			1,2K	90 68
07/07/2018 14:38	Check http://iea2018.o			998	118 47
29/06/2018 15:31	The conference venue of			741	169 68
22/05/2018 18:41	register to one of the			736	39 41

700

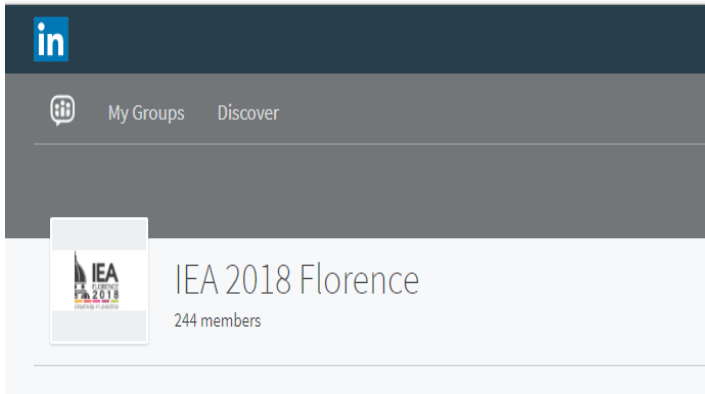
**Launch of
conference APP**

800

**Countdown «30 days to
opening»**

1200

**Publication of
conference program**



**Linked in Now 320
members
+ 70 members in the
last 3 months**



**Twitter account active
Good interaction 60
followers**



followers

506

**Launch of
conference APP**

Interazioni Tweet

IEA2018 @IEA2018florence

Did you know? You could have your personal IEA 2018 Congress in your hands!

How? Download the IEA 2018 Official App, discover the conference tools and create your own IEA 2018 Agenda!

Now available on Google Play (Android) and App Store (iPhone) [#humanfactors](#) [#IEA2018](#)

Visualizzazioni	506
Interazioni totali	18
Mi piace	6
Clic sul profilo	6
Clic su hashtag	3
Espansioni dettagli	2
Retweet	1



Raggiungi un pubblico più ampio

Aumenta le interazioni promuovendo questo Tweet!

Inizia

- **Preserve the knowledge on the Triennial Congress** for next editions: consolidate a conference format with a **permanent committee**
- Create a **Council of companies advisors** (to maintain also after the Conference, consolidate the relationship with sponsors)
- Define **A new strategy for attracting sponsors** for the Triennial Congress: difficulties in finding companies interested in such a general event.
- The **multidisciplinarity is an added value** for developing the knowledges but it is a limit for the sponsors' attraction
- Establish a **permanent collaboration with an editor** for papers publication: conference is an opportunity and not a cost for an editor

- Dissemination by promoting the conference in other IEA events around the globe and **creating collaboration with other federated societies** is crucial for global participation
- Role of the **technical committees should be reinforced and structured**
- Use the conference as an opportunity for promoting HFE in your own country and reinforce the local society (new members from participants thanks to specific registration policies)
- Official language: **simultaneous translation** can favourite participation
- Social media are strategic
- Define the **added value for attending the conference by target** for the promotion plan

- **Website:** it is necessary to consider the ergonomic aspect from the very beginning of its construction
- Ad-hoc solutions with clear basic rules for attracting participants: **being inclusive** but respect the organizational procedures (deadlines, special requests)
- **Organize side events** on specific technical domains to attract sponsors with a specific interest in a professional community
- **Plan Special issues** in journals from other scientific domains in order to disseminate the HFE knowledge in other fields
- **Provide the organization with an Organizing Secretariat** and a team from the federated society or from an organization affiliated to the society that can guarantee continuity and stability
- **Participants' Mailing list** has to be of IEA property
- Emphasize the **multidisciplinarity** of the Conference through the program and topics

Thanks for your Attention!



26 – 30 August 2018

www.iea2018.org



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