



Industrial Drives Committee Meeting  
October 1<sup>st</sup>, 2019  
Baltimore, Md



# IAS Industrial Drives Committee (IDC) Meeting

Tuesday, October 1, 2019

6:00 pm – 7:00 pm

Room 338

# Agenda

1. Introduction of members and recognition of new members and IEEE fellows
  - Request to recruit new Associate Editors
  - Submission of papers to Transactions on Industry Applications
  - New Open Access Journal
  - Future conferences
    - ECCE 2020, ICEM 2020, SLED 2020
  - Recruit topic chairs & session chairs for ECCE 2020
2. Old business/reports
  - Approval of 2018 meeting minutes
  - Vice-chair, Paper Review – Transactions papers
  - Vice-chair, Programs – Report on ECCE 2019
  - Vice-chair, Standards Subcommittee
  - Report on SLED 2019, ACEMP-OPTIM 2019, SDEMPED 2019
3. Awards and recognitions
  - Conference awards
  - Awards Subcommittee 2019
  - Associate Editors
4. New business
  - Nomination of 2020 IDC slate of officers
5. Adjournment

# 1.- Introduction of Members

- Recognition of new members and IEEE Fellows

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## 2.- Old business/reports

- Approval of 2018 meeting minutes
- Mahesh Swamy, Paper Review – Transactions papers
- Luca Zarri, Programs – Report on ECCE 2019
- Gianmario Pellegrino – Report on SLED 2019
- Bulent Sarlioglu – Report on ACEMP-OPTIM-2019
- Luca Zarri – Report on SDEMPED 2019

## 2.- Old business/reports

### Approval of 2018 meeting minutes

Written by Jul-Ki Seok, announced to IDC members to download it at IDC website (<http://site.ieee.org/ias-idc/resources/>) in Nov. 1<sup>st</sup> 2018.

Sent once again to IDC members on Sept. 4<sup>th</sup> 2019.

## 2.- Old business/reports

### Vice-Chair Paper Review Report on Transactions papers

Mahesh Swamy

# Vice-Chair Paper Review Report on Transactions papers



- Papers Submitted based on Conference
- Papers Accepted based on Conference
- Accept to Reject Ratios
- Papers Received based on Country of Origin of First Author
- Papers Accepted based on Country of Origin of First Author
- Time Statistics



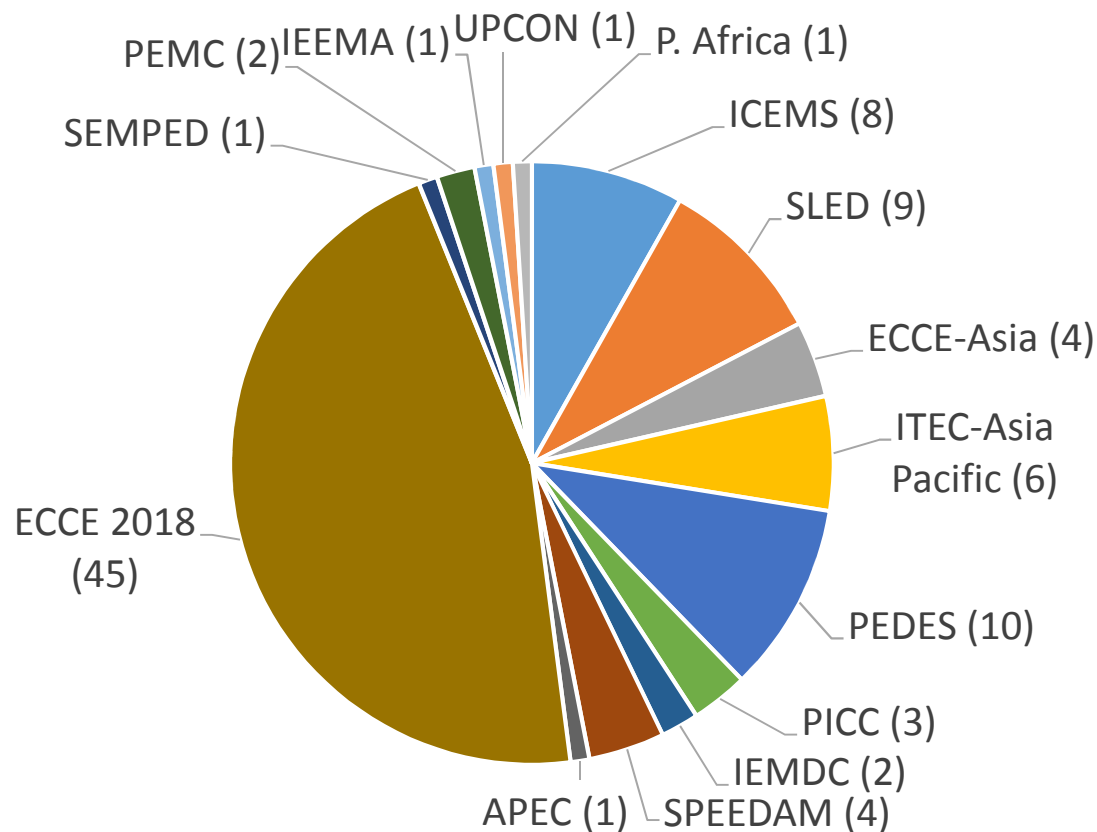
# Papers Submitted based on Conference



Total Paper Received (Original submission)= 101

Expired+Withdrawn= 2+1=3

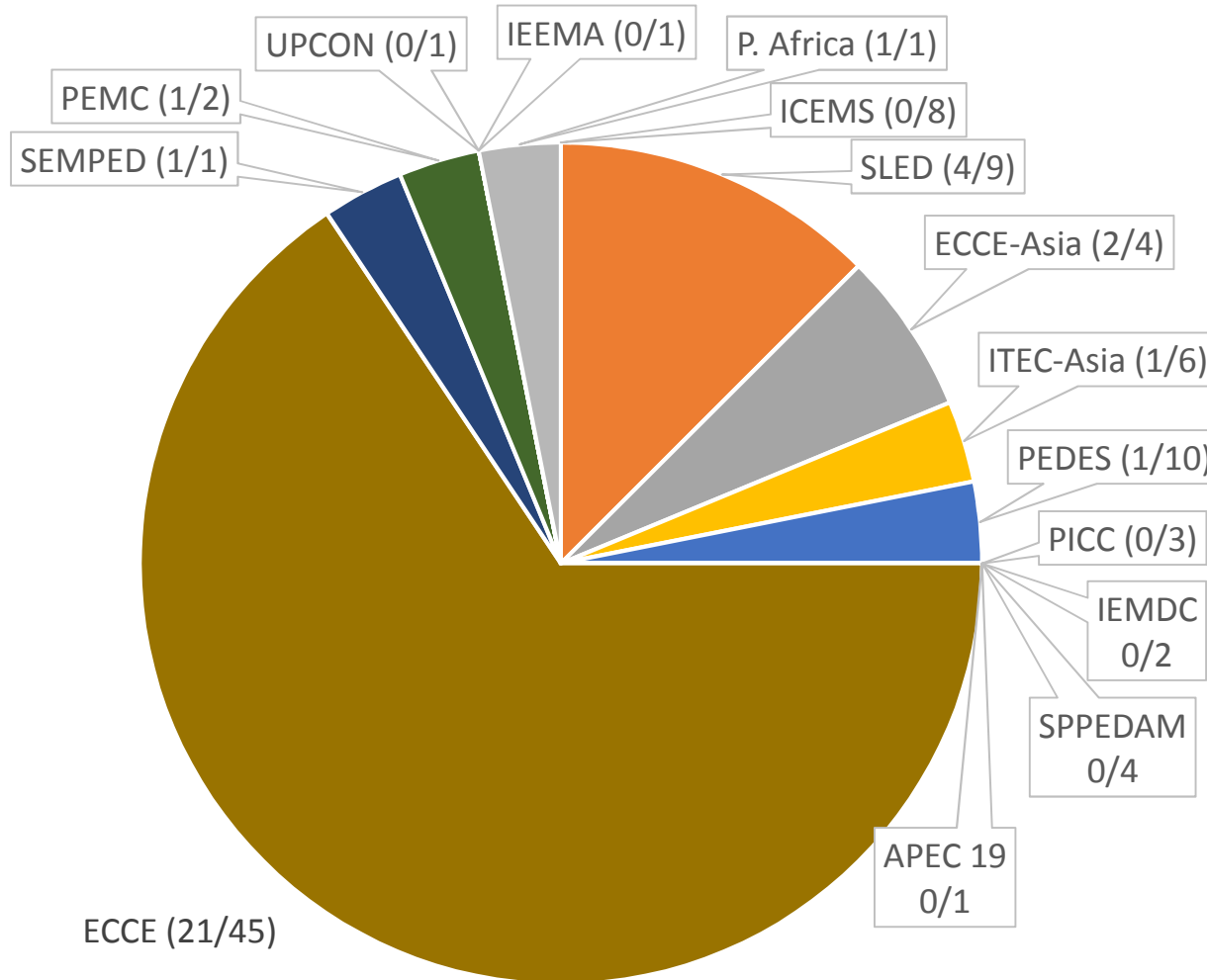
Papers accounted for in Pie Chart= 98



- Original submission starts from October 1 2018
- Authors of 2 papers did not submit revisions - time allotted has since expired. 1 paper was withdrawn after first review

# Papers Accepted based on Conference

All Accepted Papers (32) by Conference

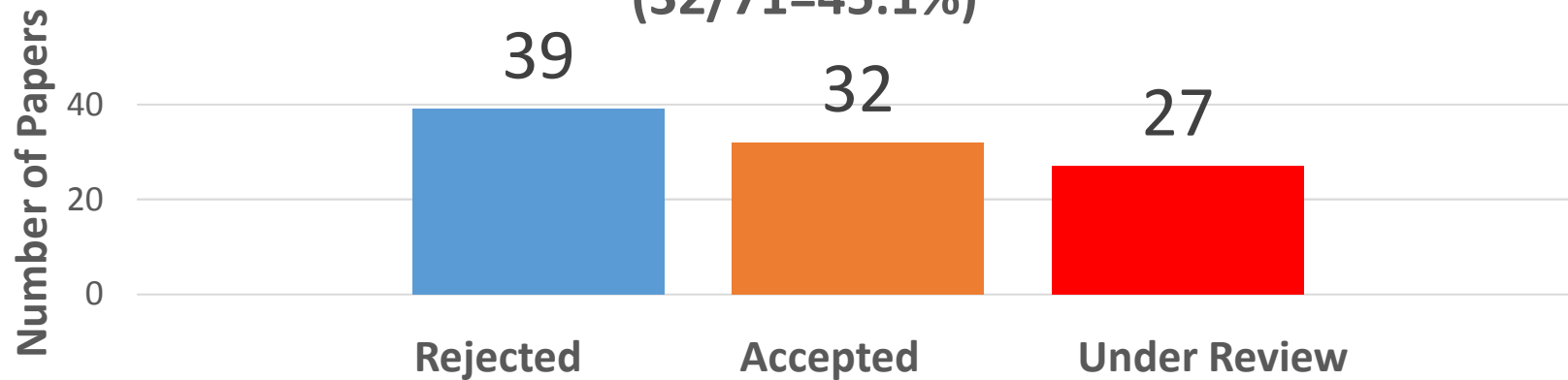


- Maximum papers submitted was from ECCE. Maximum acceptance is also from ECCE
- Asian conferences did not fare well
- IEMDC participation is low

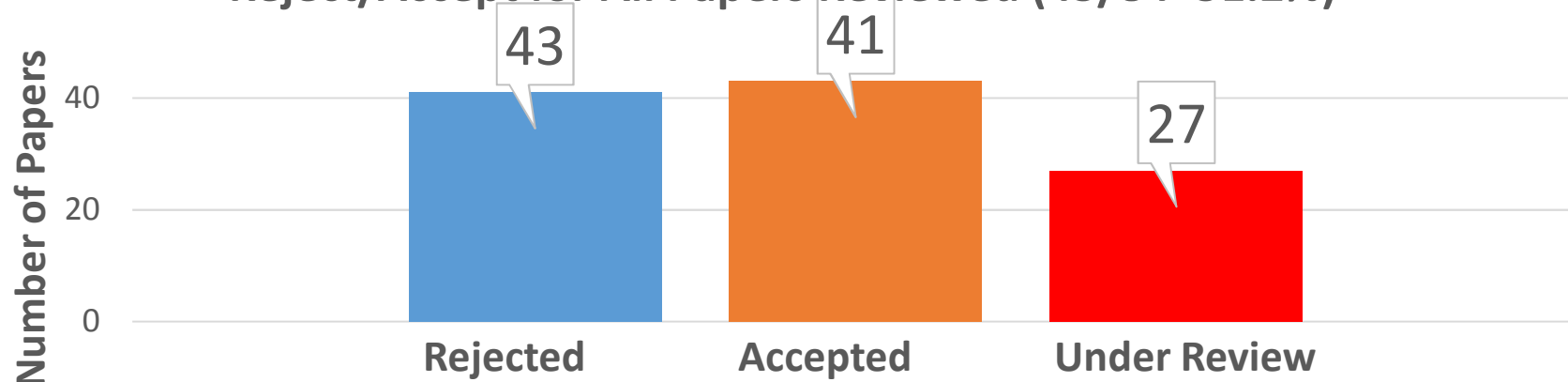
# Accept/Reject Ratio



Reject/Accept for Total Original Papers Reviewed  
(32/71=45.1%)

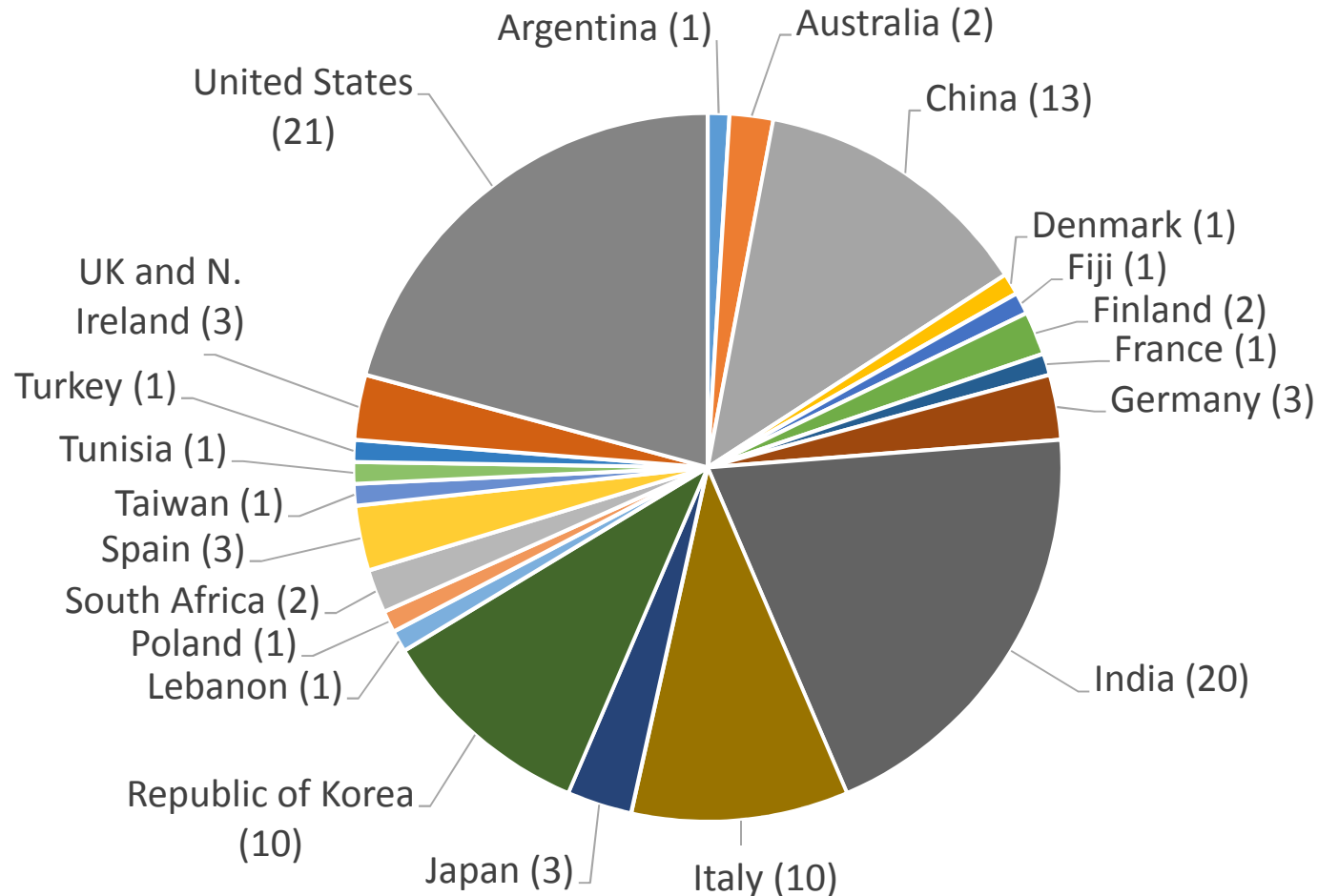


Reject/Accept for All Papers Reviewed (43/84=51.2%)



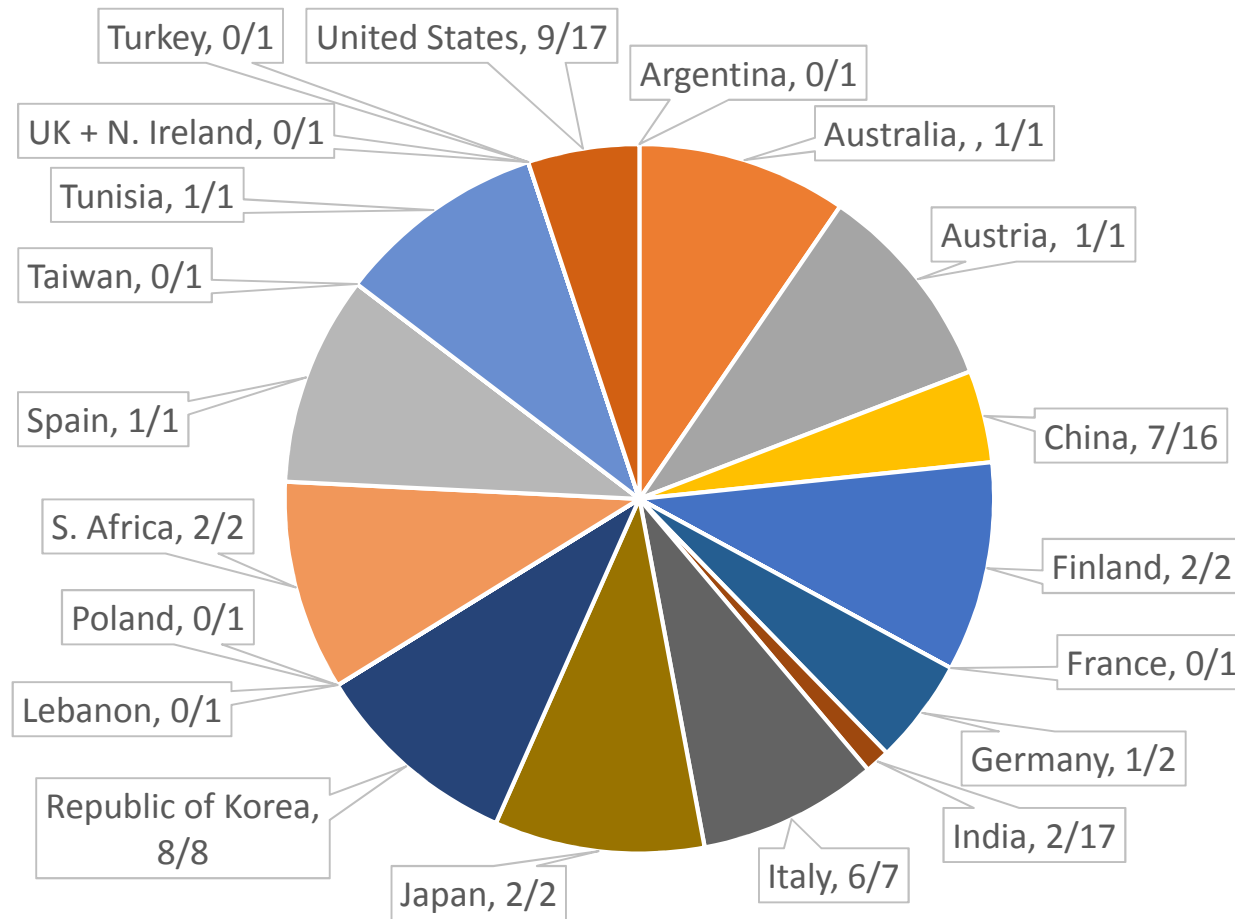
# Papers Received based on Country of Origin

Total Paper Received (Original submission)= 101  
Expired + Withdrawn= 3



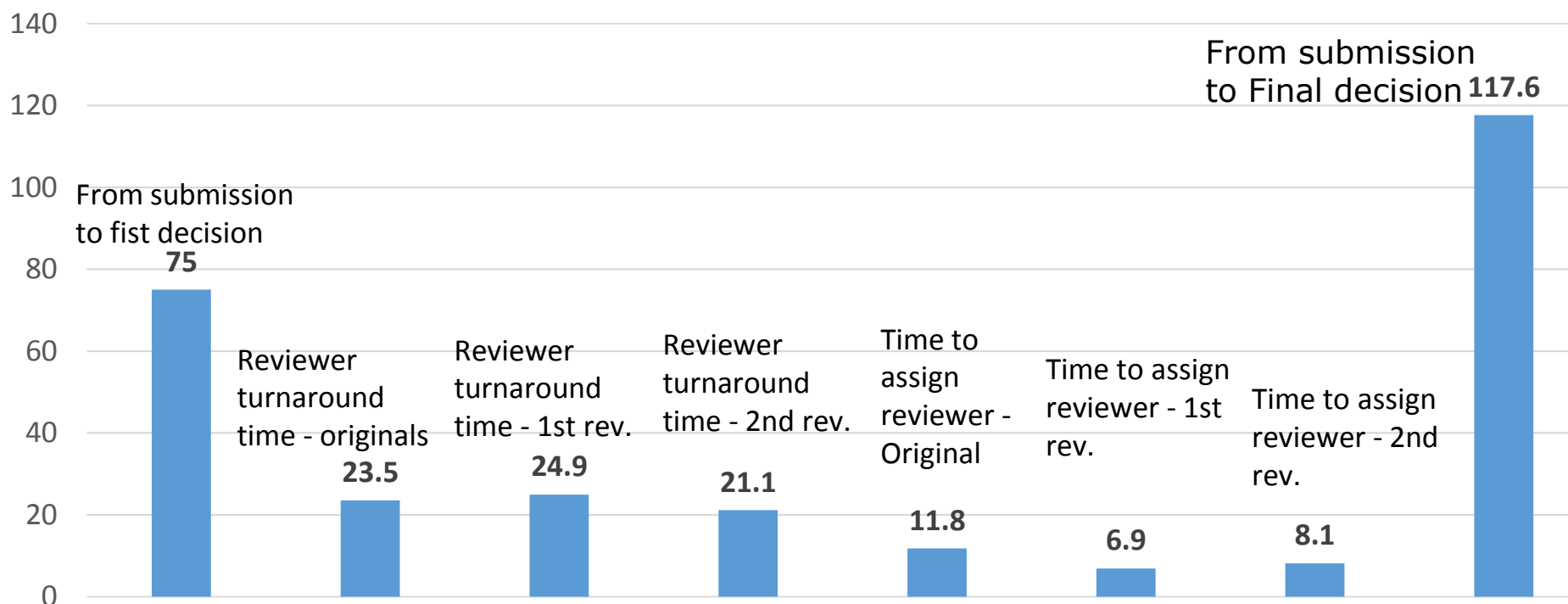
# Papers Accepted based on Country of Origin

Manuscript Accepted by Country, Total decided = 84  
Accepted= 43, Rejected= 41, Acceptance Ratio= 51.2%



# Time Statistics

## Time Statistics



## 2.- Old business/reports

Programs – Report on ECCE 2019

Luca Zarri

## ECCE 2019 Technical Program Committee Members, Electric Drives

### Vice-chairs

Luca Zarri

Antonio J. Marques Cardoso

### Topic Chairs (18)

- |                       |                    |
|-----------------------|--------------------|
| ❖ Di Pan              | ❖ Shih-Chin Yang   |
| ❖ Michele Mengoni     | ❖ Hao Lei          |
| ❖ Prerit Pramod       | ❖ Lijun He         |
| ❖ Xu Wei              | ❖ Roberto Petrella |
| ❖ David Diaz Reigosa  | ❖ Michael Harke    |
| ❖ Zhe Zhang           | ❖ Alberto Bellini  |
| ❖ Juan M. Guerrero    | ❖ Pinjia Zhang     |
| ❖ Giacomo Scelba      | ❖ Arijit Banerjee  |
| ❖ Shafiq Ahmed Odhano | ❖ Gabriele Rizzoli |

Thank you to all Topic Chairs!



## ECCE 2019 Technical Program Committee Members, Electric Drives

### Session Chairs (34)

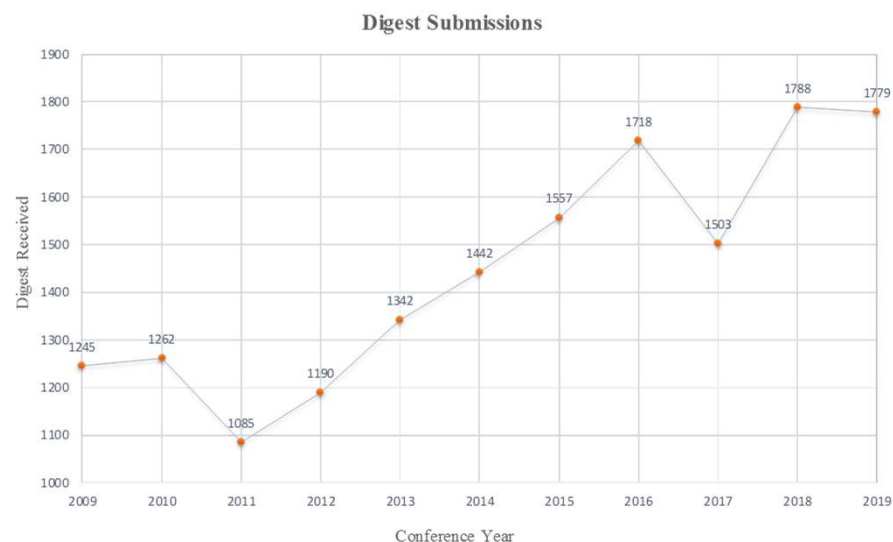
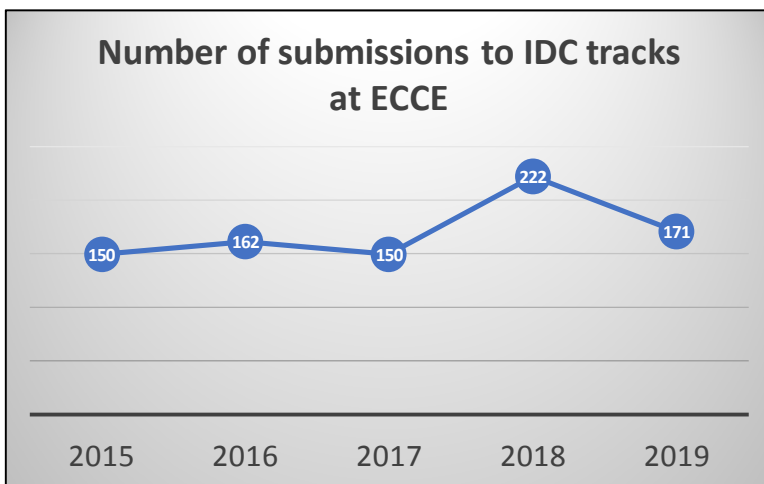
- ❖ Alberto Bellini
- ❖ Antonio J. Marques Cardoso
- ❖ Arijit Banerjee
- ❖ Bulent Sarlioglu
- ❖ David Diaz Reigosa
- ❖ Di Pan
- ❖ Fernando Briz
- ❖ Giacomo Scelba
- ❖ Giulio de Donato
- ❖ Iustin Radu Bojoi
- ❖ Jiangbiao He
- ❖ Juan Manuel Guerrero
- ❖ Lei Hao
- ❖ Lijun He
- ❖ Luca Zarri
- ❖ Mahesh Swamy
- ❖ Mario Pacas
- ❖ Marko Hinkkanen
- ❖ Michael Harke
- ❖ Milijana Odavic
- ❖ Shih-Chin Yang
- ❖ Shafiq Ahmed Odano
- ❖ Thomas Jahns
- ❖ Thomas Wolbank
- ❖ Pinjia Zhang
- ❖ Prerit Pramod
- ❖ Ranga Tallam
- ❖ Roberto Petrella
- ❖ Volker Staudt
- ❖ Wei Xu
- ❖ Wu Lijian
- ❖ Xuechao Wang
- ❖ Yukai Wang
- ❖ Zhe Zhang

Thank you to  
all Session  
Chairs!

## Track H: Electric Drives (171 submissions)

1. General (9)
2. Induction motor drives (13)
3. PM and IPM motor drives (31)
4. Control of electric drives (38)
5. Drives applications (4)
6. Sensor-less drives (22)
7. Sensors and transducers (4)
8. Diagnosis, reliability and EMI (10)
9. High speeds and direct drives (5)
10. Energy efficient motor drives (9)
11. Medium voltage drives and high-power drives (4)
12. New technologies and integrated drives (5)
13. Drives for aerospace and traction applications (10)
14. Electrical drives for wind & other renewable integration (6)
15. Drive-utility interface (1)

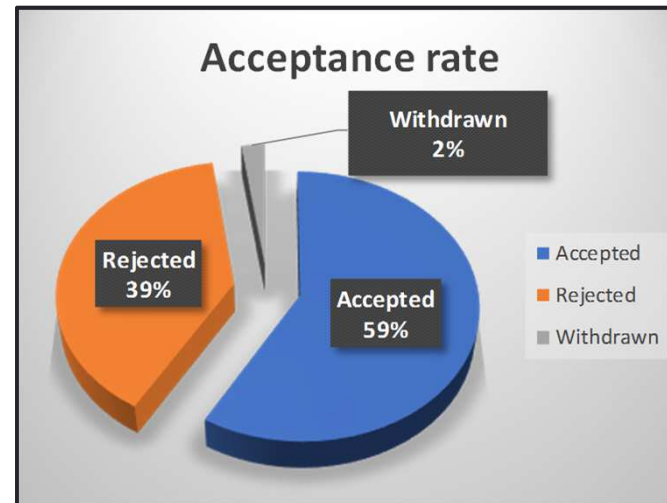
## Submission trends



- The number of digests received is almost constant from 2015 to 2019 (about 10% of the total), although there was a peak in 2018.

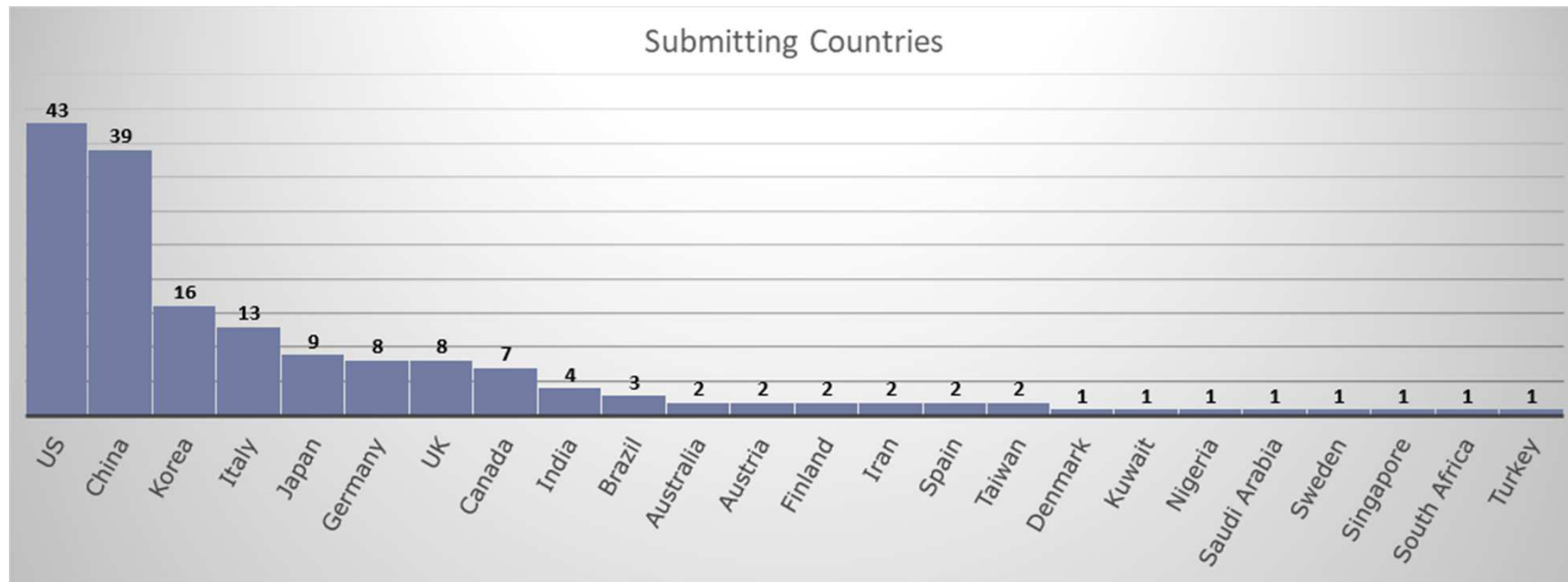
## Overall Statistics (2019)

- Number of digests: 171
  - Papers withdrawn: 4
  - Papers accepted: 100
  - Papers rejected: 67
- 
- The acceptance ratio is 0.598%.
  - A total of 56 papers were distributed into 13 oral sessions.
  - The papers were selected purely on merit of abstracts.
  - The average number of reviews per paper was around 4.5.
  - Memorial sessions for Prof. Bob Lorenz (Mon.-Tue.) and Prof. Manfred Depenbrock (Wed.)



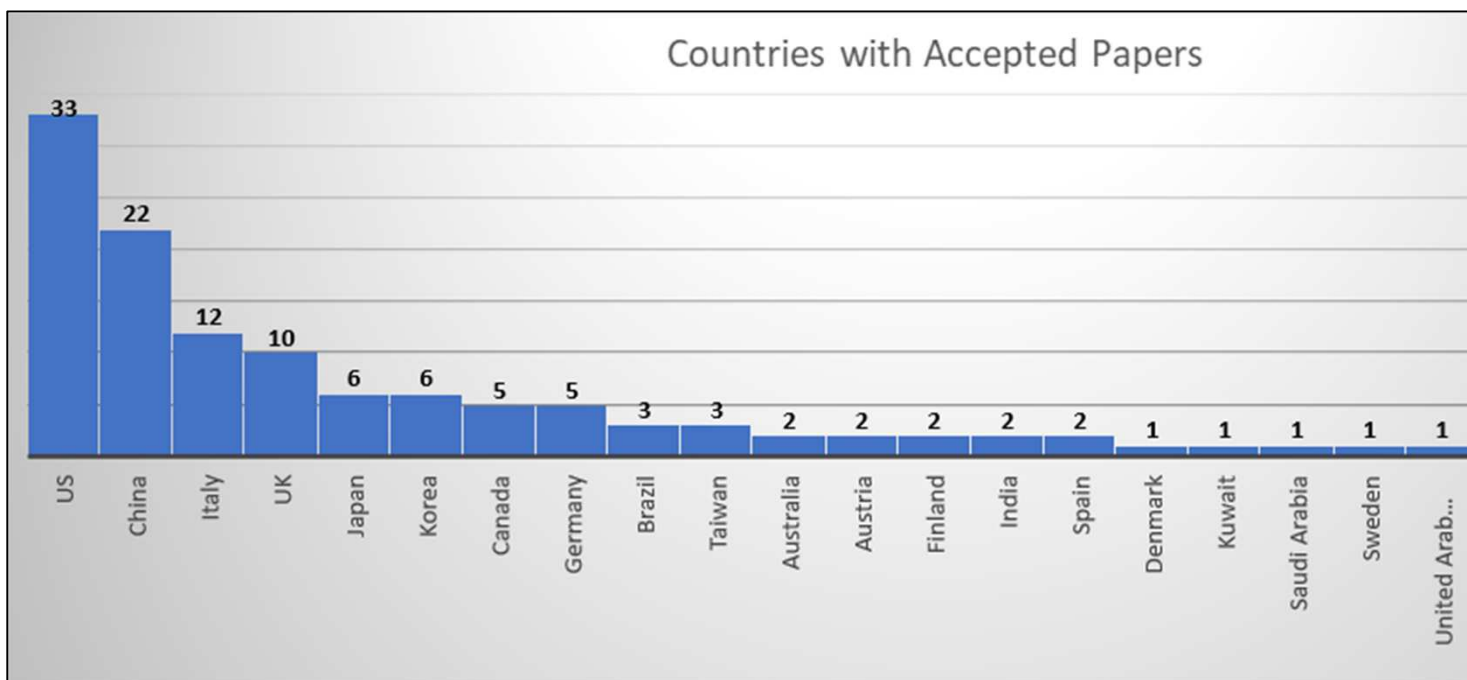
## Submitting countries (first author)

- A total of 24 different countries are involved
- United States (43) and China (66) submitted about 47 % of the total number of digests, followed by South Korea (16), Italy (13), Japan (9) and Germany and UK (7).



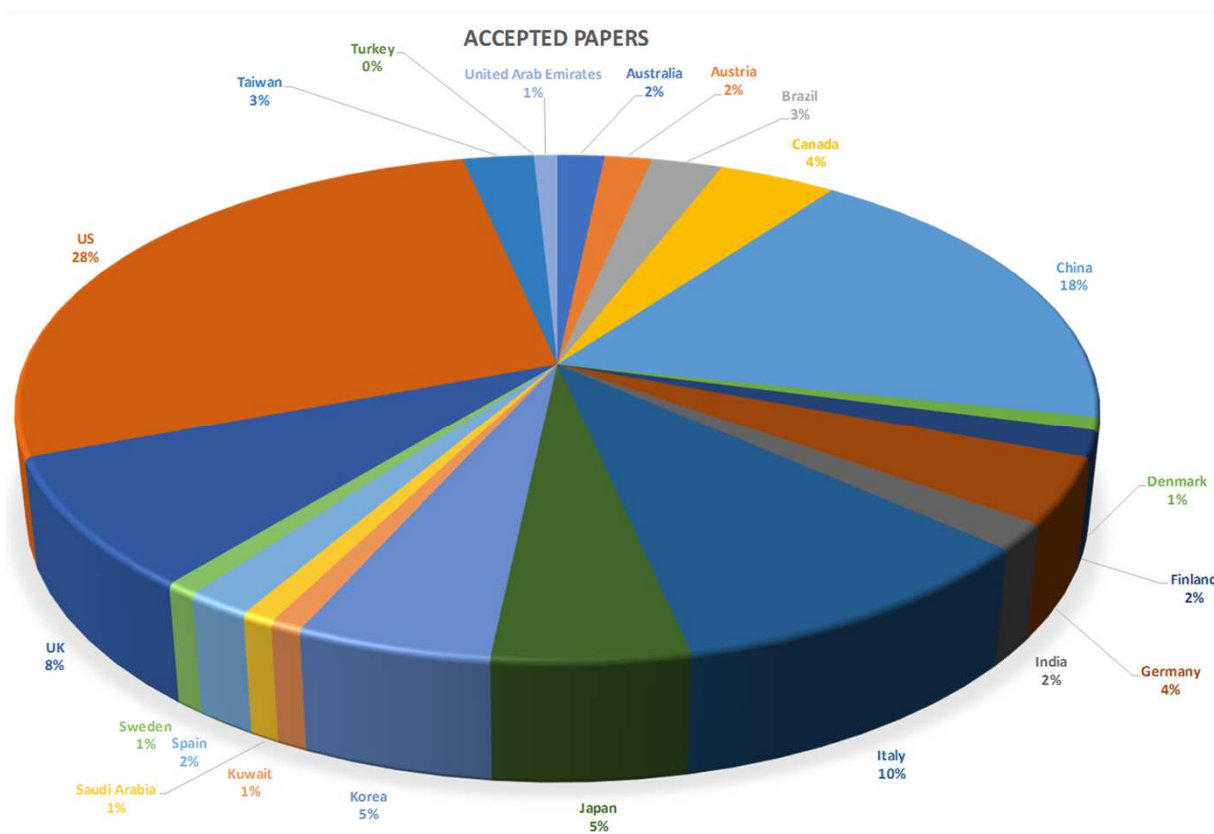
## Distribution of the accepted papers based on the country of the submitting author

- About 55 percent of the accepted papers come from United States (33) and China (22), followed by Italy (12), UK (13), Japan and Korea (6).



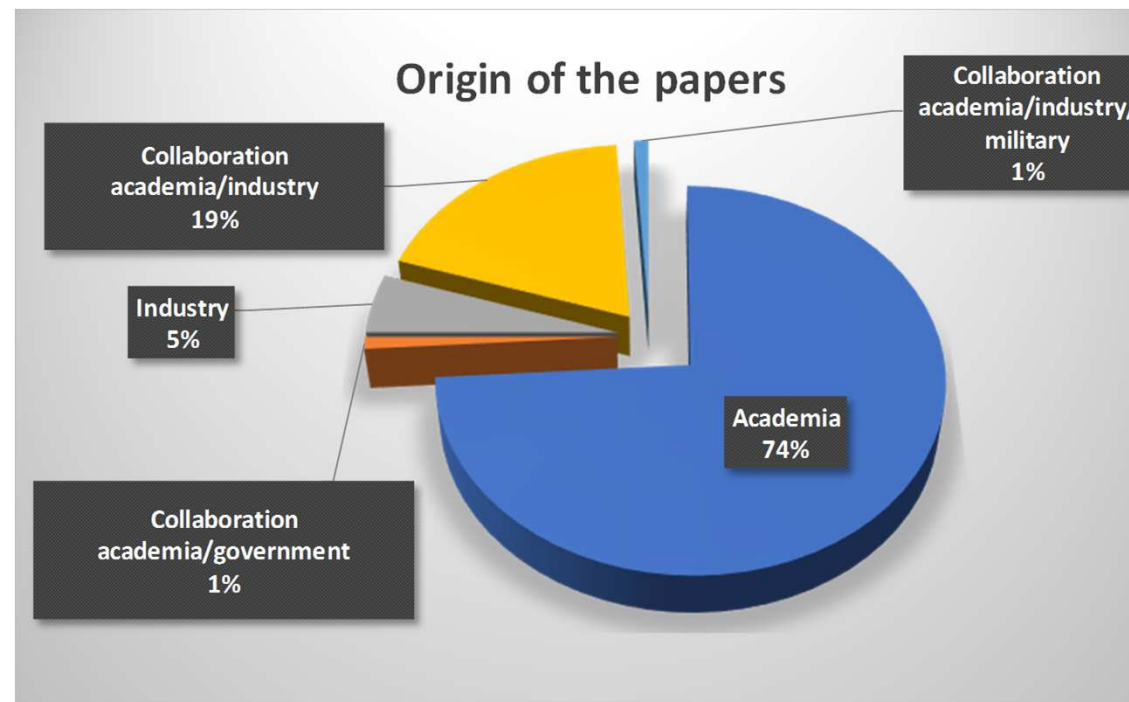
## Distribution of the accepted papers based on the country of the submitting author

- About 55 percent of the accepted papers come from United States (33) and China (22), followed by Italy (12), UK (13), Japan and Korea (6).



## Relevant Statistics

- Number of papers involving a student: 80 (107 in 2018 and 50 in 2017)
- Number of papers with industrial involvement 24 (32 in 2018 and 13 in 2017)





## 2.- Old business/reports

Vice-Chair Standards Subcommittee

Kevin Lee

## 2.- Old business/reports

Programs – Report on SLED 2019

Gianmario (Jimmy) Pellegrino

## 2.- Old business/reports

Programs – Report on ACEMP-OPTIM 2019

Bulent Sarlioglu

## 2.- Old business/reports

Programs – Report on SDEMPED 2019

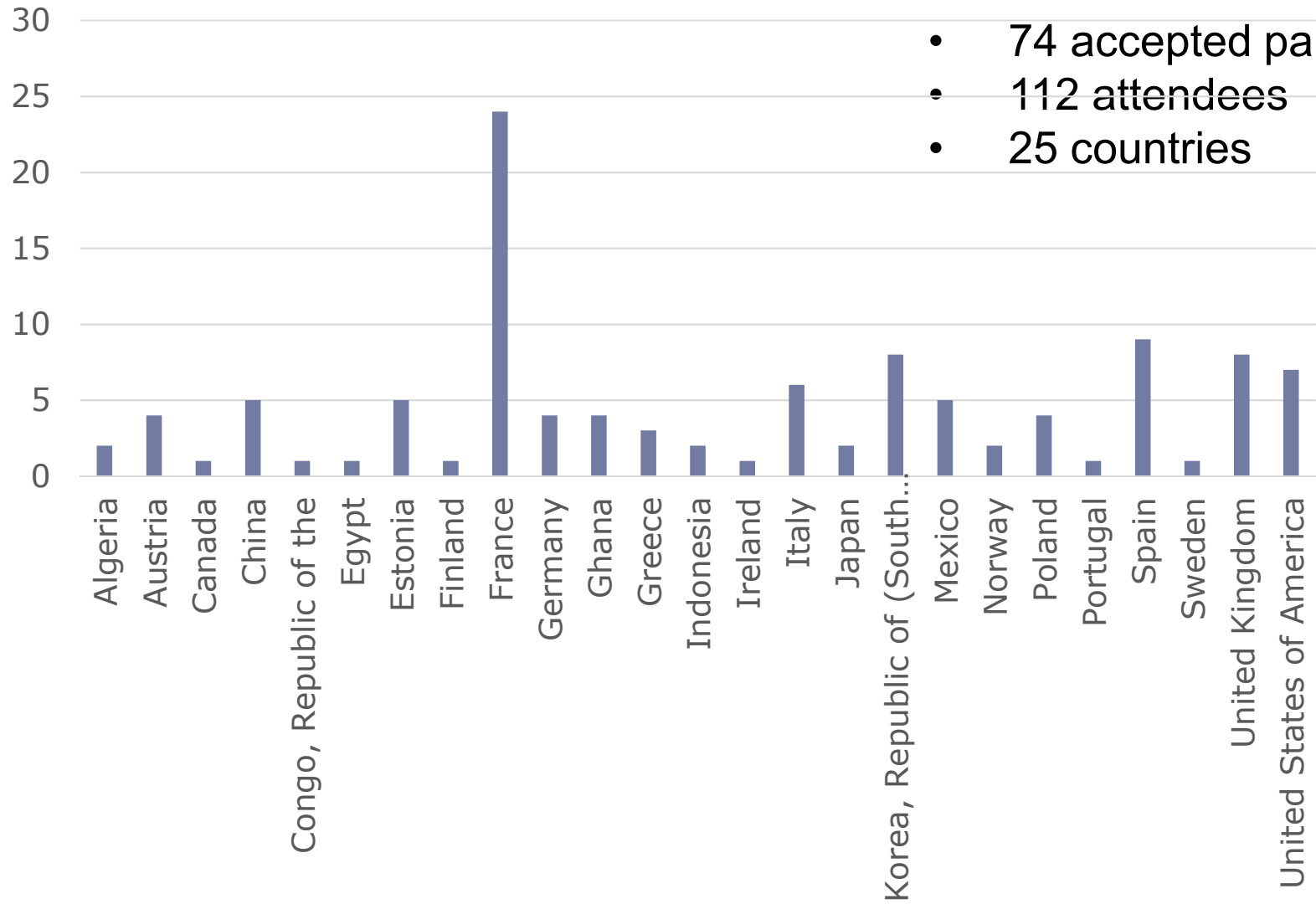
Luca Zarri

# SDEMPED

27>30 August 2019  
 Symposium on Diagnostics for Electric Machines, Power Electronics and Drives  
 Toulouse, France



Option 1 Final assembly line A380	Option 2 A350 XWB Discovery Tour	Option 3 Guided tour of the "Old wings association"
 <i>For more details click on the picture</i>	 <i>For more details click on the picture</i>	 <i>For more details click on the picture</i>



- 74 accepted papers
- 112 attendees
- 25 countries

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## 3.- Awards and recognitions

Prize papers and Awards Subcommittee

Fabio Giulii Capponi  
University of Rome "La Sapienza"



## 3.- Awards and Recognitions

### Conference Awards

#### Papers considered

All ECCE papers submitted to Trans. on Industry Applications that received a non-negative review by End of **March** were considered (12 papers).

#### Review process

Six criteria: Readability, Use of Figures and Graphics, Education, Broad Interest, Significance, Impact.

Each criteria is scored from 0 to 5

According to the above criteria, each reviewer was requested to define his preferred ranking list of the 12 papers

A score was given to each paper according to its position in each ranking list.

The scores resulting from the reviewers' opinions were summed to find the final score of each paper.

## 3.- Awards and Recognitions

### Awards Subcommittee

- Fabio Giulii Capponi (Chair) Sapienza - University of Rome
- Richard Lukaszewski Allen-Bradley
- Ion Boldea University Politehnica Timisoara
- Jun Koo Kang LG Electronics

## Third Prize

Title: Torque Ripple Minimization in Six-Step Modulated PMSM Drives via Fast DC Bus Dynamics

Authors: Hung-Yen, Ou Yang, Robert D. Lorenz



## Second Prize

Title: Restart Strategy for Synchronous Reluctance Machine driving a High Inertia Load

Authors: Kibok Lee, Sara Ahmed, Srdjan M. Lukic

## First Prize

Title: Three-phase Inverter Control for AC Motor Drives with Small DC-Link Capacitor fed by Single-phase Diode Rectifier

Authors: ByungGil Kwak, Jul-Ki Seok

## Prize Paper Awards 2020

- The papers that will be **submitted** to IEEE Trans. on Industry Applications by **the end of November** will be considered for the prize paper awards.

## 3.- Awards and Recognitions

### Associate Editors

- Giacomo Scelba
- Roberto Petrella
- Long Wu
- Marcello Pucci
- Ramakrishnan Raja
- Davide Barater
- David Diaz
- Pinjia Zhang
- Yue Zhao
- Kevin Lee

Thank you to all Associate Editors for your help!

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## 4.- New Business

### Nomination of 2020 IDC slate of officers

- Chair: Mahesh Swamy, Yaskawa America Inc., USA
- Vice Chair - Papers: Luca Zarri, University of Bologna, Italy
- Vice Chair - Programs: Jul-Ki Seok, Yeungnam University, Korea
- **Secretary: Kevin Lee, Eaton Corporation, USA**
- Past Chair: Fernando Briz, University of Oviedo, Spain

**Kevin Lee (M'90–SM'05)** received Bachelor of Science from Tsinghua University, Beijing, China, in 1986, M.S. from Rensselaer Polytechnic Institute, Troy, NY, in 1990, and Ph.D. from WEMPEC, University of Wisconsin, Madison, USA in 2008, all in electrical engineering.

In 1998, he joined Eaton Corporation, where he is a Chief Engineer in Industrial Control Division, responsible for technology and product development in the fields of power quality, energy efficiency, adjustable speed drives, power distribution system architecture and control systems. Prior to joining Eaton, he was Engineering Manager at Sola/Hevi-Duty Electric, a Unit of General Signal, now Emerson Industrial Automation between 1990 and 1998.

Dr. Lee received Eaton Engineer of the Year Award in 2013 and the IEEE Industry Applications Magazine First Prize Paper Award in 2009. He is a Registered Professional Engineer in the State of Wisconsin since 1995, a certified Design for Six Sigma Black Belt, a holder of 51 U.S. and international patents, with 63 IEEE conference and Transaction papers.

Currently, he serves as IDC Standards Sub-Committee Chair and IDC Associate Editor.

## 4.- New Business

### Associate Editors

#### Looking for candidates

Send an email to IDC Publications Chair attaching your CV

Mahesh Swamy (ending Dec. 31 2019) - [mswamy@ieee.org](mailto:mswamy@ieee.org)

Luca Zarri (starting Jan. 1 2020) - [luca.zarri@ieee.org](mailto:luca.zarri@ieee.org)

## 4.- New Business

### Submission of papers to Transactions on Industry Applications

The authors should ask for an invitation email to IDC Publications Chair

Mahesh Swamy (ending Dec. 31 2019) - [mswamy@ieee.org](mailto:mswamy@ieee.org)

Luca Zarri (starting Jan. 1 2020) - [luca.zarri@ieee.org](mailto:luca.zarri@ieee.org)

Deadline: one year after an IEEE IAS sponsored conference

**The authors should highlight the changes in the journal version of the paper.**

## 4.- New Business

Presentation of New IEEE Open Access  
Journal of Industry Applications

Pericle Zanchetta / Andy Knight

## 4.- New Business

### Presentation of ECCE 2020

## 4.- New Business

Recruit Topic chairs & Session chairs  
for ECCE 2020

## 4.- New Business

### Presentation of ICEM 2020

Luca Zarri



## 4.- New Business

### Presentation of SLED 2020

Bulent Sarlioglu



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## 5.- Adjournment