



Politecnico  
di Bari



Dipartimento  
Meccanica  
Matematica  
Management

MUR  
Dipartimento  
di Eccellenza  
2018-2022  
2023-2027

## NT2F24

Politecnico di Bari  
Bari - Italy  
15 - 17 May 2024

### NEW TRENDS IN FATIGUE AND FRACTURE



#### General Information

NT2F24 congress, the 19th International Conference on New Trends in Fatigue and Fracture, aims to be an event for sharing recent research on fatigue and fracture mechanics and for identifying current trends and perspective challenges in the field. The development of new materials, including bio-materials, new production processes and new fields of applications requires the introduction of advanced modeling tools and experimental techniques capable of capturing the mechanical behavior at different length scales from the macro- to the nano-scale. Also, the development of novel industrial applications demands the consideration of reliability and integrity aspects under new scenarios. In this context the NT2F24 conference aims at establishing a fruitful place for sharing expertise, thoughts and perspectives on emerging engineering challenges.

## Registration

Registration must be notified via mail addressing to [ntff2024@poliba.it](mailto:ntff2024@poliba.it) (<mailto:ntff2024@poliba.it>)

Registration Fee

Before 5 April 2024 €500

After 5 April 2024 €600

Fee includes 3 days conference, coffee breaks, lunches (16 & 17 May), dinners (15 & 16 May), congress kit and proceedings. We invite you to the social dinner on 16 May 2024.

## Key Dates

29 March 2024 Submission of Abstracts

3 April 2024 Notification of Acceptance/Rejection

29 April 2024 Submission of final manuscript

## Organizing Committee

### *Politecnico di Bari, Italy*

Katia Casavola (Chairman)

Claudia Barile

Vincenzo Moramarco

Giovanni Pappaletta

Michele Angelo Attolico

Simone Carone

Marika Patronelli

Vimalathithan Paramsamy Kannan

### *Université de Lille, France*

Moussa Nait Abdelaziz

## Scientific Committee

Zitouni AZARI, Université de Metz, France

Nenad GUBELJAK, University of Maribor, Slovenia

Marenglen GJONAJ, Polytechnic University of Tirana, Albania

Giovanni MENEGHETTI, Università di Padova, Italy

Ljubica MILOVIC, University of Belgrade, Serbia

Davide PAOLINO, Politecnico di Torino, Italy

Carmine PAPPALETTERE, Politecnico di Bari, Italy

Oleg PLEKHOV, University of PERM, Russia

Yuri MATVIENKO, Russian Academy of Science, Russia

Guy PLUVINAGE, Université de Metz, France

Abdelawahab AMROUCHE, University of Artois, France

Erdogan MADENCI, University of Arizona, USA

Georges AYOUB, University of Michigan, USA

Ricardo AMBRIZ, Instituto Politecnico Nacional, Mexico

Luis REIS, University of Lisbon, Portugal

Siegfried SCHMAUDER, University of Stuttgart, Germany

Hui Ji SHI, Tsinghua University, China

Li Sha NIU, Tsinghua University, China

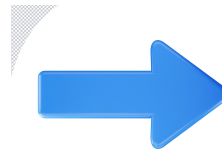
Meziane ABERKANE, University of Tizi-Ouzou, Algeria

Mohamed HADJ MELIANI, University of Chlef, Algeria

Zeljko BOILC University of Zagreb, Croatia

## Topics

- Models, criteria and methods in fracture mechanics
- Low, medium and high and very high cycle fatigue
- Simulation and testing of crack propagation at all length scales
- Finite elements methods and their application
- Damage mechanics and models
- Multiaxial/mixed mode loading
- Residual stresses
- Fatigue and fracture of weldments, joints and adhesives
- Fatigue in biomedical materials and devices
- Corrosion fatigue, environmentally enhanced degradation and cracking
- Advanced crack monitoring techniques
- Fatigue crack path prediction
- Experimental methods for damage progression analysis



ISCRIVITI ON LINE

- Machine learning approaches for damage identification
  - Mechanical behavior of additive manufactured components
- Authors are invited to propose mini-symposia and special sessions on above topics

**Abstract submission guidelines**

Authors are requested to electronically send a one page abstract of the paper by 22 March 2024.  
Only electronic submissions will be accepted: please do not fax, do not send duplicate submissions.  
All files must be sent to [ntff2024@poliba.it](mailto:ntff2024@poliba.it) with subject "NT2F abstract submission".  
The authors will be notified by 29 March 2024 about the acceptance or rejection of their papers.  
Final manuscripts are due by 29 April 2024

**Accomodations QR-code**



 **ABSTRACT TEMPLATE** ([/sites/default/files/abstract\\_template\\_ntff2024.doc](/sites/default/files/abstract_template_ntff2024.doc))

 **PAPER TEMPLATE** ([/sites/default/files/paper\\_template\\_ntff2024.doc](/sites/default/files/paper_template_ntff2024.doc))

*List of the Hotels near the venue*

Hotel Name	Direction	Distance from venue	Quality (stars)
Campus Hotel	Via Celso Ulpiani, 11, 70126 Bari	0,4 km	***
Hotel Adria	Via Luigi Zuppetta, 10, 70121 Bari BA	1,2 km	***
Hotel Excelsior Bari	Via G. Petroni, 15, 70124 Bari	1,4 km	****
Residence Hotel Moderno	Via Ettore Carafa, 20, V.le Quinto Ennio, 78, 70124 Bari BA	1,5 km	***
JR Hotels Oriente Bari	Corso Cavour, 32, 70122 Bari BA	1,7 km (Downtown)	****
JR Hotels Bari Grande Albergo delle Nazioni	Lungomare Nazario Sauro, 7, 70121 Bari BA	1,9 km (Downtown)	*****
Hotel Boston	Via Niccolò Piccinni, 155, 70122 Bari BA	2,5 km (Downtown)	***



#### How to reach Bari:

##### **By plane**

*Bari Karol Wojtyła International Airport*

Approximately 8 km northwest from the town centre.

The Bari metropolitan railway service (<https://bari.airports.aeroportidipuglia.it/en/da-e-per-gli-aeroporti/type/treni/>) connects the Airport with the Bari Centrale railway station in the city centre.

Destinations served:

<https://bari.airports.aeroportidipuglia.it/en/volare/type/voli-stagionali/> (<https://bari.airports.aeroportidipuglia.it/en/volare/type/voli-stagionali/>)

##### **By train**

*Bari Centrale railway station*

High speed connection with Rome (4 hours) and Bologna (6 hours).

Tickets and info:

- Trenitalia <https://www.trenitalia.com/en.html> (<https://www.trenitalia.com/en.html>)
- Italo <https://www.italotreno.it/en> (<https://www.italotreno.it/en>)

##### **By ship**

*Port of Bari*

The Port of Bari, close to downtown, guarantees direct ferry connections to principal east Adriatic port:

- *Durrës (Albania)*

served by Ventouris Ferries ([www.ventouris.gr](http://www.ventouris.gr) (<http://www.ventouris.gr>)), Adria Ferries (<https://www.adriaferries.com/it/> (<https://www.adriaferries.com/it/>)), Grandi Navi Veloci (<http://www.gnv.it/> (<http://www.gnv.it/>))

- *Dubrovnik (Croatia)*

served by Jadrolinija (<https://www.jadrolinija.hr/en/home> (<https://www.jadrolinija.hr/en/home>))

- *Igoumenitsa and Patras (Greece)*

served by Superfast Ferries (<http://www.superfast.com/> (<http://www.superfast.com/>)) and Ventouris Ferries (<http://www.ventouris.gr> (<http://www.ventouris.gr>))

##### **By bus or car**

Highway connection with Naples (3 hours) Brindisi (1h 20') and Bologna (8h).

Bus Tickets and info:

- MarinoBus (<https://marinobus.it/en/> (<https://marinobus.it/en/>))
- FlixBus (<https://global.flixbus.com/> (<https://global.flixbus.com/>))