



**DFG**

11th International Conference on  
**Function Spaces, Differential Operators,  
and Nonlinear Analysis**

*Oberhof/Thür. (Germany), September 22 - 28, 2024*

*Second Announcement*

Dear Colleague,

we have received your preregistration for the

**11<sup>th</sup> International Conference on  
"Function Spaces, Differential Operators, and Nonlinear Analysis"**,  
(FSDONA-2024),

*September 22-28, 2024.*

<https://fsdona2024.uni-jena.de/>

with great pleasure.

This meeting will continue the series of previous successful FSDONA-conferences held in Finland, Czech Republic and Germany (*Sodankylä-88, Friedrichroda-92, Paseky-95, Syöte-99, Teistungen-01, Milovy-04, Helsinki-08, Tabarz-11, Prague-16, Turku-19*). It is again our intention to stimulate international collaboration and to promote the interaction of the theory of function spaces with its applications to various fields of mathematics like

- PDE's (existence of solutions and regularity theory),
- spectral theory of differential and integral operators,
- approximation and computational mathematics,
- nonlinear analysis,
- inverse problems.

The conference is essentially funded by the German Research Foundation (DFG), no. Ha 2794/9-1 and the Friedrich Schiller University Jena.

We thank you for your interest and would like to give some further information.

### **1. Lectures**

The programme of the conference consists of invited lectures (50 minutes) and further talks given by the participants. The main lectures are the following (preliminary titles):

- **Andrea Cianchi**, Università di Firenze, Italy  
'Sobolev embeddings in Musielak-Orlicz spaces'
- **Karoline Disser**, University Kassel, Germany  
'On extrapolation of maximal regularity for non-autonomous parabolic operators'
- **Oscar Dominguez**, Universidad Complutense de Madrid, Spain  
'Energy conservation for the Euler equations via sparse methods'
- **Flavia Giannetti**, Università di Napoli "Federico II", Italy  
'Regularity results for solutions to some PDEs with Orlicz growth'

- **Stanislav Hencl**, Charles University Prague, Czech Republic  
'Weak limit of homeomorphisms in  $W^{1,n-1}$ : invertibility and lower semicontinuity of energy'
- **Mikyong Lee**, Pusan National University, South Korea  
'Calderón-Zygmund estimates for  $p$ -Laplace system of differential forms with BMO coefficients'
- **Angkana Rüland**, University of Bonn, Germany  
'On Some Instability Mechanisms in Inverse Problems'
- **Olli Saari**, Universitat Politècnica de Catalunya, Spain  
'Quantitative characterizations of weights and parabolic boundary value problems'
- **Yoshihiro Sawano**, Chuo University Tokyo, Japan  
'New atomic decomposition for function spaces'
- **Senjo Shimizu**, Kyoto University, Japan  
'Maximal  $L^1$ -regularity and its application to free boundary problems of the Navier-Stokes equations'
- **Wen Yuan**, Beijing Normal University, China  
'Optimal Embedding and Extension for Sobolev, Triebel-Lizorkin, and Besov Spaces on Quasi-metric Measure Spaces'

We received further applications for shorter talks and try to arrange the programme as convenient as possible. But surely we shall have parallel sessions taking place in the afternoons.

We ask all participants (who have not yet done this) to indicate their interest to give a talk **until June 30, 2024**, and to send us titles & abstracts of their talks **by August 15, 2024**, at latest. There will also be an opportunity for ad hoc -seminars.

The lecture rooms will be equipped with data projector + laptop and flip-charts.

Later you can have a look at the (preliminary) list of participants and the corresponding abstracts via our web-site.

## 2. Lecture Notes

Instead of (usual, printed) *Proceedings* we plan to offer all speakers of this workshop the possibility to send us their material, slides, links to closely related publications etc. afterwards. We collect all this material and "publish" it on a special web page of this workshop such that participants can download the files. You may contact us if you have any questions.

## 3. Venue

The conference will take place in

**"Wagners Sporthotel Oberhof", Oberhof/Thüringen**

<https://www.wagners-sporthotel-oberhof.de/>

situated in a beautiful forest landscape in the green heart of Germany.

Oberhof is a town in the Thuringian Forest – directly at the ridgeway Rennsteig, a small but very famous city for winter sports. In 2023 the double world championship in biathlon and luge took place there. Our hotel is located at a quiet place in the city of Oberhof, on the one hand close to the city center, and on the other hand close to nature. It is well-equipped and experienced to host conferences like ours.

## 4. Registration

You will receive a separate Email within the next days where we ask you to confirm and complete your details for the registration. As soon as you reply to this email to us

**fsdona2024@uni-jena.de**

**your registration becomes binding** and we shall reserve the accommodation according to your wishes then. You should reply to this confirmation message by

**June 15, 2024**

at latest.

Please note, that we cannot guarantee that everyone who applied for a single room can have it, because the total number of rooms is restricted (and we shall have many participants). So please read your confirmation message carefully! We apologise for any inconvenience this may cause you in advance.

Just keep in mind, please: there is no need and no possibility to book your accommodation and conference package directly in the hotel yourself, this is organised by us. In case you do **not** want to stay in the conference hotel and use the conference package (including full board), please indicate it as 'no accommodation needed' and contact us for further details (e.g. the expenses for the meals in which you want to take part).

## 5. Costs & Payment

The accommodation is arranged at the hotel in single and double rooms with full board (*buffet breakfast, lunch and dinner*). The price is **90 €** per night and person in a single room and **75 €** per night and person in a double room. In addition, you can choose to share a guesthouse with other participants (up to 6 persons). Here the price is **65 €** per night and person with full board. If you want to know some more details about this latter accommodation, please contact us in advance.

Moreover, since Oberhof is a climatic spa, everyone staying at the hotel is requested to pay **2 €** per day and person as a visitor's tax (directly via the hotel).

The conference fee is **150 €**, if paid before **June 30, 2024**, and **180 €** afterwards, but at latest by **August 15, 2024**. There will be a reduced conference fee for PhD students, you may contact us if you are eligible.

As soon as you have confirmed and completed the registration email (as explained above) you will receive the invoice for the conference fee (pdf, by email). There you find all the details how to pay the fee (there will be a link to pay it via credit card, as well as some information how to pay it by bank transfer). There is no possibility to pay the conference fee in cash or on site. Your hotel bill is paid in the hotel before your departure. If there is some change in your arrival or departure dates, please inform us at your earliest convenience, to avoid or reduce cancellation fees in that case.

## 6. Conference Schedule

The arrival is on Sunday evening (September 22, 2024) followed by a joint dinner. The lectures are scheduled from Monday to Friday (lasting until 6 p.m. at latest). Saturday, September 28, 2024, is the day of departure.

Wednesday afternoon is reserved for a hiking trip through the beautiful local scenery, presumably including the 'Schneekopf', the second highest peak in the Thuringian Forest, and the nearby highest-located settlement in the Thuringian Forest. The expenses for the hiking tour are less than 10 EUR per person.

Alternatively, we shall organise a guided tour to Gotha. In old travel books, this town was often described as the richest and most attractive one in Thuringia. Though this might no longer be true nowadays, it is very much worth a visit. It was the former seat of the duchy of Saxe-Gotha and is still a beautiful town. The early baroque Friedenstein Palace is famous for its exquisite collections from around the world, and surrounded by a lovely landscape park which always invites for a stroll. You will find further information on it in due time on the conference web page. However, as we have to arrange transport, guides etc. in advance, please let us know by **June 30, 2024** already whether you are interested to take part in this programme. Depending on the number of participants, the expenses for this excursion are 30-40 EUR per person.

We shall have a special workshop dinner on Wednesday evening.

## 7. Travel information

Oberhof has direct bus connections from Suhl/Zella-Mehlis and Gotha. Both cities can be reached within approximately 3 hours by train from the big airports in Berlin and Frankfurt am Main. You may find details via <https://int.bahn.de/en>. For making the arrangements as smooth as possible, we ask you to inform us about your exact arrival time in your earliest convenience.

## 8. Summary of the deadlines

- June 15, 2024** ▷ complete and return the confirmation email for your registration (*which you will get within the next days*),
- June 30, 2024** ▷ indicate your interest to present a talk,  
▷ conference fee at reduced rate,  
▷ your choice for the excursion,
- August 15, 2024** ▷ latest submission of titles and abstracts for talks,  
▷ deadline to pay the conference fee.

## 9. Latest news

You may visit our conference web-site (<http://fsdona2024.uni-jena.de/>) regularly to find out the latest news (preliminary list of participants, programme etc.).

The last announcement with further details will be mailed by the beginning of September, 2024.

We are looking forward to meeting you in Oberhof.

### *Local Organisers*

Dorothee D. Haroske (Jena)  
Marc Hovemann (Marburg)  
Cornelia Schneider (Erlangen-Nürnberg)  
Markus Weimar (Würzburg)

### *Scientific Committee*

Peter Hästö (Turku)  
Juha Kinnunen (Espoo)  
Luboš Pick (Prague)  
Jonas Sauer (Jena)  
Hans-Jürgen Schmeißer (Jena)  
Lenka Slavíková (Prague)

*For further information, please contact us via*

Friedrich Schiller University Jena  
Institute of Mathematics  
Ernst-Abbe-Platz 2  
07743 Jena, Germany

Tel. : **+49 3641 9 46190**  
Fax : **+49 3641 9 46102**  
E-mail : **fsdona24@uni-jena.de**