



DFG

International Conference on Function Spaces and Applications

Apolda/Thür. (Germany)

October 1 - 7, 2022

Second Announcement

Dear Colleague,

we have received your preregistration for the

International Conference on "Function Spaces and Applications",

(FSA-2020),

October 1 - 7, 2022

<http://fsa2020.uni-jena.de/>

with great pleasure. The aim of the conference is to concentrate on new developments and results in the theory of function spaces and its applications. The conference has two preceding events. First, it will continue the conference 'New perspectives in the theory of function spaces and their applications' (NPFSA-2017) held in September 2017 in Bełdewo (Poland). Secondly, it is part of a joint Chinese-German research project in the theory of function spaces. In that sense our conference succeeds the 'International Conference on Function Spaces and Geometric Analysis and Their Applications' held at the Nankai University, Tianjin (China) in October 2019.

The topics we have in mind are:

- new smoothness and regularity concepts,
- high-dimensional approximation and integration,
- approximation of solutions to operator equations,
- existence and regularity of solutions of (non)-linear PDE,
- compactness and concentration phenomena in function spaces,
- function spaces in complexity.

The conference is essentially funded by the German Research Foundation (DFG), no. Ha 2794/8-1 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):

- **María J. Carro**, *Universidad Complutense de Madrid / Spain*
"Solving the Dirichlet and the Neumann problem at the end-point"
- **Fernando Cobos**, *Universidad Complutense de Madrid / Spain*
"Interpolation of compact bilinear operators by the real and the complex method"
- **Agnieszka Kałamajska**, *University of Warsaw / Poland*
"Strongly nonlinear multiplicative inequalities with elliptic operators and regularity theory"
- **Eiichi Nakai**, *Ibaraki University / Japan*
"Multiple Fourier series of some radial functions and lattice point problems"

- **Luboš Pick**, *Charles University Prague / Czech Republic*
"Fractional Orlicz-Sobolev spaces"
- **Eero Saksman**, *University of Helsinki / Finland*
"Regularity of Hardy Chaos"
- **Leszek Skrzypczak**, *Adam Mickiewicz University Poznań / Poland*
"Nuclearity of some classical operators in function spaces"
- **Sergey Tikhonov**, *ICREA, CRM Barcelona / Spain*
"Truncated smooth function spaces"
- **Mario Ullrich**, *Johannes Kepler University Linz / Austria*
"On sampling numbers in L_2 "
- **Mark Veraar**, *TU Delft / The Netherlands*
"The role of vector-valued function spaces in evolution equations"

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, 2022**, and to send us titles & abstracts of their talks **by August 15, 2022**, at latest. There will also be an opportunity for ad hoc -seminars.

The lecture rooms will be equipped with data projector + laptop, and a small board.

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 etc. afterwards (preferably in **pdf**). Alternatively also a (closely linked) paper would be welcome. We collect all this material (or links to your personal web pages) 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 question.

3. 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

fsa2020@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, 2022

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.

4. Venue

The Conference will take place in

"Hotel am Schloss", Apolda / Thüringen

<https://www.hotel-apolda.de/hotel-en/>

situated in a beautiful countryside about 20 km northwest of Jena.

Our hotel is located at a quiet place in the city centre, at the foot of the Apolda castle. It is well-equipped and experienced to host conferences like ours.

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 **110 €** per night and person in a single room and **85 €** per night and person in a double room.

The conference fee is **110 €**, if paid before **June 30, 2022**, and **125 €** afterwards, but at latest by **August 15, 2022**.

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 Saturday evening (October 1, 2022) followed by a joint dinner. The lectures are scheduled from Sunday to Thursday (lasting until 6 p.m. at latest). Friday, October 7, 2022, is the day of departure.

Tuesday afternoon is reserved for an excursion to the *Panorama Museum in Bad Frankenhausen* (<https://www.panorama-museum.de/>). The Panorama Museum presents the monumental painting "Early Bourgeois Revolution in Germany" (14 metres high and 123 metres in circumference) by Werner Tübke, a quite well-known East German painter (the name 'museum' is a little bit misleading, it is more art than history). You will find further information on it in due time on the conference web page. However, as we have to arrange busses, guides etc. in advance please let us know by **August 15, 2022** whether you are interested to take part in this programme.

We shall have a special workshop dinner, most likely on Tuesday evening.

7. Travel information

Apolda has direct train connections to Erfurt, Leipzig and Halle, and is thus also easy to reach from the airports in Frankfurt/Main, Leipzig, and Berlin. Further detailed travel instructions to the venue can be found on the web-pages of the hotel.

For making the arrangements as smooth as possible, we ask you to inform us about your exact arrival time in Apolda in your earliest convenience.

8. Summary of the deadlines

- June 15, 2022** complete and return the confirmation email for your registration (*which you will get within the next days*),
- June 30, 2022** indicate your interest to present a talk, conference fee at reduced rate,
- August 15, 2022** latest submission of titles and abstracts for talks, deadline to pay the conference fee, your choice for the excursion.

9. Latest news

You may visit our conference web-site (<http://fsa2020.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 September 15, 2022.

We are looking forward to meeting you in Apolda.

Local Organisers

Glenn Byrenheid (Jena)
Dorothee D. Haroske (Jena)
Hans-Jürgen Schmeisser (Jena)
Winfried Sickel (Jena)
Dachun Yang (Beijing)

Scientific Committee

Marcin Bownik (Oregon)
Dorothee D. Haroske (Jena)
Aicke Hinrichs (Linz)
Hans Triebel (Jena)
Dachun Yang (Beijing)

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 : **fsa2020@uni-jena.de**