Final report on the workshop:

Challenges in Spectral Theory of Differential Operators

organized by P. Siegl (TU Graz) and F. Štampach (CTU Prague) supported by AKTION project n. 94p4

The workshop took place at the Graz University of Technology in December 19-22, 2022, with 39 registered participants. A program of the workshop consists of 28 scientific lectures on recent developments and open problems in the spectral theory of differential operators and a special session on existing programs that can be used to support Czech-Austrian scientific collaboration at the first place.

Except several recognized experts in the field and senior scientists, the workshop hosted 19 students or early career researchers and 6 women. The complete list of participants, detailed program as well as abstracts to all talks are available at the webpage of the workshop:

https://sites.google.com/view/graz-workshop-22/home

In addition, among several existing research, mobility and exchange programs between Czech and Austrian institutions such as FWF-GAČR, OeAD, ERASMUS+ and CEEPUS, AKTION has been emphasized and introduced in greater detail in the non-scientific session of the workshop. The respective presentation is also downloadable from the webpage above.

Desired goals of the workshop has been successfully achieved. The workshop delivered high quality talks on recent trends in the field, helped to gain visibility to early career researchers and opened possibilities for a continuation or establishing entirely new collaborations. Students and their possible mentors were informed about recently arranged new ERASMUS+ agreements between TU Graz and CTU in Prague. Moreover, first discussions on a future FWF-GAČR joint proposal involving several senior researchers as well as students from both institutions have been initiated during the meeting.

Changes in participants supported by AKTION:

Recall participants, which were supposed to be supported by AKTION according to the grant proposal, involved 7 students (Lukáš Heriban, David Kramár, Thi Bich Tuyen Vu, Václav Růžek, Patrik Šnauko, Tomáš Hrdina, Vojtěch Bartoš), 2 postodcs (Borbala Gerhat, Tho Nguyen) and 3 CTU academic staff members (David Krejčiřík, František Štampach, Matěj Tušek). There occur three changes in the list of participating students:

- Student Thi Bich Tuyen Vu canceled her participation for family reasons and has been replaced by student Jan Havel.
- Student David Kramár canceled his participation for personal reasons.
- Student Patrik Šnauko canceled his participation for health reasons.

Consequently, the EUR support for David Kramár and Patrik Šnauko has not been used. David Kramár also used no CZK support for his travel expenses. On the other hand, Patrik Šnauko used his CZK travel support as its medical problems started shortly before his departure when his train ticket has already been bought.

In total, we have used 2700 EUR from the granted 3060 EUR support and 23517.97 CZK from the granted 30000 CZK travel support as a result of various prices of train tickets. The unused 6482.03 CZK will be send back to the deposit account of MŠMT according to the project rules. More details are summarized in Table 1 below. Official account summary from the account department of FNSPE at CTU will be send separately.

On behalf of both organizers, I acknowledge gratefully the AKTION program and DZS for their support.

January 9, 2023

František Štampach

Frantise & Sampach