



Fostering Opportunities Towards Slovak Excellence in Advanced Control for Smart Industries

D3.1– Schedule of planned participation at international conferences and of guest lectures

Date by 31.12.2022

v.1



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DELIVERABLE INFORMATION

Work package	WP3
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Abstract	<p>The project aims at increasing the research and academic prospects of Slovak University of Technology in Bratislava, Slovakia (STUBA) and at initiating the evolution of STUBA into a modern, reputed excellent institution that performs high-quality research in advanced automatic control, educates top-quality scholars and industrial practitioners, and is successful in active dissemination and exploitation of its research and innovation efforts. For this purpose, STUBA teams up with two renowned research groups in automatic control from RU Bochum, Germany (RUB) and Pisa University, Italy (UNIPI). The specific goals of the action are to reinforce the collaboration with the two research groups from Western Europe, to intensify research in advanced automatic control, to open up new collaboration channels through academic and industrial networking, to train excellent young/senior researchers and project managers, and to effectively disseminate and exploit the research results of STUBA. The unique features of the project are: - Adoption/amendment of internal research project-related rules and procedures and develop project management toolbox, - Research efforts aiming at the continued creation of high-quality research results and software tools, - Establishment of a series of guest scientific and academic lectures, - Exchanges and training of project managers and research (junior and senior) personnel, - Organization of conferences and invited sessions, seminars with industry, and annual summer schools, - Preparation and implementation of a new PhD curriculum at STUBA, - Establishment of an academic-industrial research and innovation cluster.</p>
Keywords	<p>Control theory and optimization; Sensor networks, embedded systems, hardware platforms; Embedded systems;</p>

	Monitoring and control systems; Embedded systems in automation and control.
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Document Revision History

Version	Date	Description of change	List of contributors

Disclaimer

The FrontSeat project is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

PARTNERS

The consortium of FrontSeat consists of 3 partners, as presented here below.



STUBA

Slovak University of Technology in Bratislava

RUHR
UNIVERSITÄT
BOCHUM



RUB

Ruhr University Bochum



UNIVERSITÀ DI PISA

UNIPI

University of Pisa

EXECUTIVE SUMMARY

The FrontSeat project, which is financed under the call HORIZON-WIDERA-2021-ACCESS-03, commenced on October 1th, 2022. The project is coordinated by the Slovak University of Technology in Bratislava – STUBA (SK). The consortium comprises the Università di Pisa (IT) and the Ruhr-Universität Bochum (DE). FrontSeat is scheduled to complete its activities on September 30th 2025.

This deliverable summarizes the planned contributions to international conferences from within FrontSeat, the planned guest lectures of FrontSeat participants at the three participating universities, and the planned guest lectures to be given by world-leading speakers from outside of the FrontSeat consortium.

Table 1 lists the targeted conferences in chronological order. In summary, FrontSeat aims to create visibility for its efforts and results at three conferences in each project year.

The International Conference on Process Control (PC) is a biannual international conference organized by STUBA and sponsored by the Institute of Electrical and Electronics Engineers (IEEE). PC brings together experts in control from academia and industry and, thus, is an ideal platform for increasing the visibility of STUBA as well as of the partners. Equally importantly, the PC conferences provide ideal opportunities for fostering joint work with industrial partners that may serve as project partners in future Horizon Europe projects. FrontSeat will contribute to PC in 2023 and in 2025.

The European Control Conference (ECC) is an annual conference organized by the European Control Association (EUCA), which is sponsored by both worldwide professional organizations in the field of automatic control, the IEEE and the International Federation of Automatic Control (IFAC). ECC is the largest European conference in the field and therefore provides similar opportunities as PC but with a wider scope of topics and a broader audience and participants. FrontSeat aims to contribute to ECC 2023 and ECC 2024.

The IFAC World Congress, which takes place every three years, is the flagship conference of IFAC, the international umbrella organization for all national organizations of control professionals in the fields of Mechanical, Process, and Chemical Engineering. Since the World Congress is the most important and biggest event of IFAC, it provides a perfect opportunity for the FrontSeat team to keep in touch with the newest developments in their professional fields, and to present FrontSeat as a seed for future consortia in the field of automatic control.

Finally, the IFAC Symposium on Advanced Control of Chemical Processes, the IFAC Symposium on Dynamics and Control of Process Systems, and the IEEE Conference on Decision and Control are specialized conferences in the particular research fields of the

partners, which provide an opportunity to both keep up with the current developments in the field, and to present the state of the art achieved in FrontSeat to specialists from all over the world.

It is one of the central goals of FrontSeat to establish STUBA as a place where top-quality science is created, discussed, and disseminated. Guest lectures, both those held by STUBA researchers visiting the partners, and experts from outside the FrontSeat consortium serve as one of the means to reach this goal. Table 2 summarizes the planned guest lectures, where the first part of the table lists the lectures that either have already taken place or have been scheduled. The last entries of the table list additional international experts to be invited to give lectures at STUBA. These lectures will be the seed for the creation of a sustained guest lecture seminar series at STUBA, which is one of the declared aims of FrontSeat meant to strengthen STUBA's role in the knowledge triangle research – education – innovation.

Schedule of planned participation at international conferences

Table 1: Participation at international conferences

Conference	Project Year	Sponsors/organizers	Location	Dates	Participation and goals
Process Control Conference 2023	1	IEEE	Štrbské Pleso, Slovak Republic	June 6-9, 2023	G. Pannocchia plenary speaker STUBA Organizer Joint publications (planned) Invited session organized by FrontSeat partners (planned)
European Control Conference 2023	1	EUCA	Bucharest, Romania	June 13-16, 2023	Publications by the partners (submitted)
IFAC World Congress 2023	1	IFAC	Yokohama, Japan	July 9-14, 2023	Joint publications (submitted)
Conference on Decision and Control 2023	2	IEEE	Marina Bay Sands, Singapore	December 13-15, 2023	Joint publications (planned)
Adchem 2024	2	IFAC	Toronto, Canada	July 14-17, 2023	Joint publications (planned) Invited session organized by FrontSeat partners (planned) G. Pannocchia plenary speaker M. Mönnigmann International Program Chair
European Control Conference 2024	2	EUCA	Stockholm, Sweden	June 25-28, 2024	Joint publications (planned)
Conference on Decision and Control 2024	3	IEEE	Milan, Italy	December 17-19, 2024	Joint publications (planned)
Dycops 2025	3	IFAC	TBD	TBD	Joint publications (planned)
Process Control Conference 2025	3	IEEE	Štrbské Pleso, Slovak Republic	June, 2025	Invited session organized by FrontSeat partners (planned)

Schedule of planned guest lectures

Table 2: List of planned guest lectures

Date	Place	Lecturer	Affiliation	Title
2022-10-18	STUBA	Fatima Matamoros	National Center for Scientific Research/U Lorraine, Nancy, France	Modeling and Optimization of Low-Pressure Gas-Carburizing Furnaces
2022-10-25	RUB + stream	Mikael Kurula	Abo Akademi University, Turku, Finland	Explicit Model Predictive Control for PDEs
2022-11-25	stream	Radoslav Paulen	STUBA	Convexification Techniques for Stationary/Dynamic Global Optimization and Set-Based Computing
2023-01-11	RUB + stream	Martin Gulan	STUBA	TBA
2023-01-13	RUB + stream	Ján Boldocký	STUBA	TBA
2023-01-30	STUBA + stream	Gabriele Pannocchia	UNIFI	TBA
2023-02-24	STUBA + stream	Martin Mönnigmann	RUB	TBA
2023-03-01	UNIFI + stream	Radoslav Paulen	STUBA	TBA
2023-03-03	UNIFI + stream	Rastislav Fáber	STUBA	TBA
2023-03-10	STUBA + stream	Raphael Dyrška	RUB	TBA
2023-04-03	STUBA + stream	Riccardo Bacci di Capaci	UNIFI	TBA
2023-04-14	UNIFI + stream	Lenka Galčíková	STUBA	TBA
2023-06-07	STUBA + stream	Gabriele Pannocchia	UNIFI	Control and Optimization in the Presence of Uncertainties: Theory and Practice
2023-06-09	STUBA + stream	Stefan Krämer	Bayer AG	AI or Process Control – Process Understanding and Good Dynamic Modelling Remains Key
2023-09-06	RUB + stream	Rudolf Pribiš	STUBA	TBA
2023-09-07	RUB + stream	Michal Balla	STUBA	TBA
2023-09-15	STUBA + stream	Marco Vaccari	UNIFI	TBA
2023-09-22	STUBA + stream	Sebastian Leonow	RUB	TBA
2023-10-20	RUB + stream	František Duchoň	STUBA	TBA
2023-10-27	RUB + stream	ESR TBA	STUBA	TBA

Date	Place	Lecturer	Affiliation	Title
2024-01-26	STUBA + stream	Gabriele Pannocchia	UNIFI	TBA
2024-02-21	STUBA + stream	David Müller	RUB	TBA
2024-02-23	UNIFI + stream	Rastislav Fáber	STUBA	TBA
2024-03-01	RUB + stream	Juraj Oravec	STUBA	TBA
2024-03-08	RUB + stream	Ján Boldocký	STUBA	TBA
2024-04-05	TBD	Sabína Vašová	STUBA	TBA
2024-04-12	TBD	Denis Benka	STUBA	TBA
2024-04-19	STUBA + stream	Riccardo Bacci di Capaci	UNIFI	TBA
2024-05-17	STUBA + stream	ESR TBA	RUB	TBA
2024-08-23	STUBA + stream	Martin Mönnigmann	RUB	TBA
2024-09-20	STUBA + stream	Gabriele Pannocchia	UNIFI	TBA
2024-09-27	STUBA + stream	Marco Vaccari	UNIFI	TBA
2024-10-18	UNIFI + stream	Erika Pavlovičová	STUBA	TBA
2025-01-31	STUBA + stream	Gabriele Pannocchia	UNIFI	TBA
2025-02-21	RUB + stream	Anna Vargová	STUBA	TBA
2025-02-26	STUBA + stream	David Müller	RUB	TBA
2025-02-27	STUBA + stream	Martin Mönnigmann	RUB	TBA
2025-02-28	RUB + stream	Martin Klaučo	STUBA	TBA
2025-03-14	STUBA + stream	ESR TBA	UNIFI	TBA
2025-03-21	UNIFI + stream	Marek Wadinger	STUBA	TBA

Date	Place	Lecturer	Affiliation	Title
2025-06-04	STUBA + stream	Marco Vaccari	UNIFI	TBA
2025-06-06	STUBA + stream	Riccardo Bacci di Capaci	UNIFI	TBA
2025-07-04	STUBA + stream	ESR TBA	RUB	TBA
2025-08-25	STUBA + stream	Martin Mönnigmann	RUB	TBA
2025-09-12	STUBA + stream	Sebastian Leonow	RUB	TBA
TBA	STUBA + stream	Abderrazak Latifi	Université de Lorraine, Nancy, France	TBA
TBA	STUBA + stream	Sorin Olaru	Supelec Paris, France	TBA
TBA	STUBA + stream	Mortne Hovd	NTNU Trondheim, Norway	TBA
TBA	STUBA + stream	Sebastian Engell	TU Dortmund, Germany	TBA
TBA	STUBA + stream	Timm Faulwasser	TU Dortmund, Germany	TBA
TBA	STUBA + stream	Benoit Chachuat	Imperial College London, UK	TBA
TBA	STUBA + stream	Jean-Pierre Corriou	Université de Lorraine, Nancy, France	TBA
TBA	STUBA + stream	Cesar de Prada Moraga	University of Valladolid, Spain	TBA
TBA	STUBA + stream	Johannes Jäschke	NTNU Trondheim, Norway	TBA
TBA	STUBA + stream	Dinesh Krishnamoorthy	Eindhoven University of Technology, Netherlands	TBA
TBA	STUBA + stream	Sergio Lucia	TU Dortmund, Germany	TBA
TBA	STUBA + stream	Alexander Mitsos	RWTH Aachen, Germany	TBA
TBA	STUBA + stream	Leyla Ozkan	Eindhoven University of Technology, Netherlands	TBA
TBA	STUBA + stream	Sigurd Skogestad	NTNU Trondheim, Norway	TBA
TBA	STUBA + stream	Boris Houska	ShanghaiTech University, China	TBA
TBA	STUBA + stream	Mario Eduardo Villanueva	MT School for Advanced Studies Lucca, Italy	TBA

ABBREVIATIONS

Abbreviation	Expanded Version
TBA	To be announced
STUBA	Slovak University of Technology in Bratislava
UNIFI	University of Pisa
RUB	Ruhr University Bochum
IFAC	International Federation of Automatic Control
IEEE	Institute of Electrical and Electronics Engineers
EUCA	European Control Association
ESR	Early Stage Researcher
SR	Senior Researcher
ADCHEM	IFAC Symposium on Advanced Control of Chemical Processes
DYCOPS	IFAC Symposium on Dynamics and Control of Process Systems
CDC	IEEE Conference on Decision and Control