

LAURENCE BRANDENBERGER

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Education

- 2019 PhD in Political Science, University of Bern, Department of Social Sciences, *summa cum laude*
- 2015 Santa Fe Institute, Complex Systems Summer School, Santa Fe, NM
- 2014 MA in Sociology, University of Bern, *summa cum laude*
- 2013 BA in Sociology, University of Bern

Employment

- 2024 - Post-Doc at University of Zurich, Chair of Political Methodology
- 2022 - 2024 Senior scientist at ETH Zurich, Chair of Systems Design
- 2018 - 2022 Post-Doc at ETH Zurich, Chair of Systems Design
- 2014 - 2019 PhD student at Eawag, the Water Research Institute of ETH Domain, Department of Environmental Social Sciences (secondary affiliation: University of Bern, Institute of Political Science)
Supervisors: Philip Leifeld (University of Essex) and Karin Ingold (University of Bern)
- 2015 Visiting scholar at the Department of Politics and Public Administration, University of Konstanz, Germany
- 2011 - 2014 Student research assistant of Prof. Ben Jann, Institute of Sociology, University of Bern
- 2011 Student research assistant of Prof. Axel Franzen and Katrin Botzen, M.A., Institute of Sociology, University of Bern

Project Funding and Major Grants

- 2025 ETH Board, Swiss Data Science Center; Research project *MappingDemocraSci*. **Principal Investigator**. Project duration 04/2025–04/2027. 242,100 CHF.
- 2024 SNF project funding. “Measuring political Success” (SNF grant number 10.003.190). **Principal Investigator**. Project duration 10/2024–09/2027. 803,825 CHF.
- 2021 ETH Board, Swiss Data Science Center; Research Project *EvolvingDemocraSci*. **Co-Principal Investigator**. 263,110 CHF.

Awards and Minor Grants

2023	SNF, Scientific Exchange Grant; Interdisciplinary workshop with 23 participants on the topic of "Measuring, Modeling and Mitigating Opinion Polarization and Political Cleavage (MMM)". Co-PI, 12,400 CHF.
2016	Travel Grant to attend the 33rd Annual Meeting of the Society for Political Methodology (Polmeth Conference), Houston TX, July/August 2016, \$1,567
2015	Grant to attend the Complex Systems Summer School at the Santa Fe Institute, Berne University Research Foundation (IMG), grant #4/15, \$4,400

Software Development

<code>embed2discover</code>	A web-application for supervised content analysis. Under development in collaboration with the Swiss Data Science Center.
<code>data2neo</code>	A Python-package for the transformation of various data sources into neo4j knowledge graphs. <i>Consultant</i> . Curated by Julian Minder.
<code>pdf2data</code>	A software-package for the Extraction of Data form PDF Documents. Under development in collaboration with the Swiss Data Science Center.
<code>rem</code>	R-package for the estimation of Relational Event Models. R package version 1.3.1. Latest Version on CRAN ; Github repository . <i>Creator, owner</i> .
<code>ghypernet</code>	R-package for the estimation of multi-edge network regressions. R package version 1.1.0. <i>Contributor</i> .

Teaching

University Courses

Fall 2025	The Politics of Influence: Interest Groups, Lobbying, and Political Advocacy. Master/PhD Seminar, University of Zürich.
Spring 2025	Divided We Stand: Tracing the Roots and Impact of Political Polarization. Bachelor Seminar, University of Zürich.
Spring 2025	The Politics of Legislative Debates, Master/PhD Seminar with exercises, University of Zürich.
Fall 2024	The Swiss Parliament in Comparison. Master/PhD Seminar with exercises, University of Zürich.
Fall 2023	Data Science for Social Challenges [co-teaching with Ramona Roller]. Master/PhD Seminar, ETH Zurich.
Fall 2022	Data Science for Social Challenges [co-teaching with Ramona Roller, #363-1167-00L]. Master/PhD Seminar, ETH Zurich.
Fall 2017	Social Networks [Soziale Netzwerke, #424297]. Proseminar, University of Bern.
Fall 2016	Political Networks [Politische Netzwerke, #424297]. Proseminar, University of Bern.

Winter/Summer Schools and Workshops

- 2019 Introduction to Network Regression Models for multi-edge/weighted networks using the ghypernet-package in R. With Giona Casiraghi. Workshop taught at the European Conference on Social Networks 2019, EUSN, ETH Zurich, Zurich (CH), September 9-12, 2019.
- 2016 - 2018 Inferential Network Analysis (WD208). Teaching Assistant of Philip Leifeld at the ECPR Winter School in Methods & Techniques, University of Bamberg, Bamberg (DE). Annual one-week course (2016, 2017, 2018).

Thesis Supervision

- 2025 Master Thesis of Marina Haller on decoding migration debates.
- 2025 Master Thesis of Viktor Burgi on representation of the working class.
- 2025 Master Thesis of Sebastian Idzenga on cosponsorship-based ideology.
- 2020-2024 PhD Thesis of Sophia Schlosser. Second advisor. Defense: May 2024.
- 2023 Co-examiner of PhD Thesis of Giuseppe Arena, Tilburg University
- 2022 Master Thesis of Vincent Jung on ideological embeddings of Swiss MPs.
- 2018 Bachelor Thesis of Marco Wyss on the potential bias students with migration background face when applying for apprenticeships.
- 2018 Bachelor Thesis of Oscar Thees on the use of hyperlink networks in social sciences. Co-supervision with Mario Angst.

Research Project Involvement

- 2025 - 2027 “MappingDemocraSci: From Text to Transparency: Mapping Political Advocacy and Stances” A Swiss Data Science Center (SDSC) project (PI: **Dr. Laurence Brandenberger**, Co-PI: Dr. Sophia Schlosser), funded by the ETH Board. 242,100 CHF.
- 2024 - 2027 “Measuring political Success” (SNF grant number 10.003.190). **PI: Dr. Laurence Brandenberger**, CO-PI: Dr. Luis Salamanca. Funded by the SNF, 803,825CHF.
- 2022 - 2024 “EvolvingDemocraSci: Advancing parliamentary data analysis: Linking issues and collaborations of individual politicians” A Swiss Data Science Center (SDSC) project (PI: Prof. Dr. Dr. Frank Schweitzer, Co-PI: **Dr. Laurence Brandenberger**), funded by the ETH Board. 263,110 CHF.
- 2019 - 2022 “Analyzing Co-Sponsorship Networks from 127 Years of the Swiss Federal Assembly” (Nr. 184963, PI: Prof. Dr. Dr. Frank Schweitzer, funded by the Swiss National Science Foundation (SNF). Post-Doctoral researcher.
- 2018 - 2020 “A research platform for data-driven democracy studies in Switzerland - DemocraSci” A data science collaboration with the Swiss Data Science Center SDSC (PI: Prof. Dr. Dr. Frank Schweitzer), funded by the ETH Board. Research consultant.
- 2014 - 2017 “Overlapping Subsystems: Identification and Integration of Fragmented Games in Swiss Water Politics” (Nr. 149410, PI: Prof. Dr. Karin Ingold), funded by the Swiss National Science Foundation (SNF). Research assistant.

Reviewing Activities

Journals: American Political Science Review, American Sociological Review, Advances in Complex Systems, European Journal of Political Research, European Union Politics, Politics and Governance, Public Administration, Social Networks, Sociological Methods and Research, Swiss Political Science Review

Funding agencies: Schweizerischer Nationalfonds, Deutsche Forschungsgemeinschaft

Presentations

- 2024 "After the enfranchisement: Legislative elites reactions to womens inclusion". Presentation at the European Political Science Association 14th Annual Conference, EPSA, University of Köln, Köln (Germany), July 4-6, 2024.
- 2024 "Effects of legislative seating arrangements on parliamentary productivity". Presentation at the European Political Science Association 14th Annual Conference, EPSA, University of Köln, Köln (Germany), July 4-6, 2024.
- 2024 "Effects of Legislative Seating Arrangements on Parliamentary Productivity". Presentation at the Annual Congress 2024 Swiss Political Science Association, University of St. Gallen, Switzerland, February 8-9, 2024.
- 2024 "PDF2Data: A Tool For Extracting Information from PDF Documents. Presentation at the Annual Congress 2024 Swiss Political Science Association, University of St. Gallen, Switzerland, February 8-9, 2024.
- 2023 "Word Embeddings: Providing More Meaningful Representations of Legislators". Paper presented at the 119th American Political Science Association Annual Meeting, APSA, Los Angeles, US, August 31 - September 3, 2023.
- 2023 "Issue Engagement of Legislators and a Trend towards Issue Specialization". Paper presented at the 119th American Political Science Association Annual Meeting, APSA, Los Angeles, US, August 31 - September 3, 2023.
- 2023 "Effects of legislative seating arrangements on parliamentary productivity.". 8th ECPR Standing Group of Parliaments Conference, Vienna, Austria, July 6-8, 2023.
- 2023 "The Evolution of Parliamentary Polarization in Switzerland: An over century-long perspective". 8th ECPR Standing Group of Parliaments Conference, Vienna, Austria, July 6-8, 2023. Presented by co-author.
- 2023 "Word Embeddings and the Secrets they Hold: Examining Legislator Representations Based on Legislative Speech and Bill Text Embeddings.". 8th ECPR Standing Group of Parliaments Conference, Vienna, Austria, July 6-8, 2023. Presented by co-author.
- 2023 "How has Parliamentary Populism in Switzerland evolved over time? Evidence from the Swiss parliamentary speeches spanning 130 years". Presentation at the European Political Science Association 13th Annual Conference, EPSA, Glasgow, UK, June 22-24, 2023.
- 2023 "Topic engagement of Swiss members of parliament. Is the Swiss parliament undergoing a trend of specialization?". Presentation at the European Political Science Association 13th Annual Conference, EPSA, Glasgow, UK, June 22-24, 2023. Presented by co-author.
- 2023 "PDF2DATA: A Tool For Extracting Information from PDF Documents". Presentation at the PolMeth Europe Conference, King's College, London, UK, June 19-20, 2023.

- 2023 "Issue engagement in the Swiss Parliament over the past 130 years". Presentation at the Annual Congress 2023 Swiss Political Science Association, University of Basel, Switzerland, February 2-3, 2023.
- 2023 "How has Parliamentary Populism in Switzerland evolved over time? Evidence from the Swiss parliamentary speeches spanning 130 years". Presentation at the Annual Congress 2023 Swiss Political Science Association, University of Basel, Switzerland, February 2-3, 2023.
- 2023 "Understanding the evolution of collaboration dynamics within the US House over the past 40 years". Presentation at the Annual Congress 2023 Swiss Political Science Association, University of Basel, Switzerland, February 2-3, 2023. Presented by co-author.
- 2023 "Word Embeddings: how they provide us with meaningful ideological representations of Swiss politicians". Presentation at the Annual Congress 2023 Swiss Political Science Association, University of Basel, Switzerland, February 2-3, 2023. Presented by co-author.
- 2022 "Towards a Parliamentary Database". Presentation at the Conference on Political Careers, University of Basel, Switzerland, June 20-22, 2022.
- 2022 "Sitting next to you: Effects of seating arrangements on parliamentary collaboration". Presentation at 15th Annual Political Networks Conference, University of Iowa, US, June 13 - July 15, 2022.
- 2022 "Sitting next to you: Effects of seating arrangements on parliamentary collaborations". Presentation at the Annual Congress 2022 Swiss Political Science Association, University of Lausanne, Switzerland, February 3-4, 2022.
- 2022 "Towards a Parliamentary Database—Processing over 250,000 PDF Documents and Structuring their Content". Presentation at the Annual Congress 2022 Swiss Political Science Association, University of Lausanne, Switzerland, February 3-4, 2022.
- 2021 "Hyperlink networks between organizations - the next frontier in policy network studies or a hopeless mess? Fresh evidence for an ongoing debate" Presentation at the European Conference on Social Networks 2021, EUSN, University of Naples Federico, Naples (IT), September 6-10, 2021. Presented by the co-author.
- 2021 "Networks over Time. Hierarchy Formation in Open Source Software Collaborations." Presentation at the sociology research colloquium, University of Bern, Bern (CH), March 17, 2021.
- 2020 "Measuring political polarization in the Swiss parliament." Presentation at the interdisciplinary symposium on the resilience and performance of networked systems, ETH Zurich, Zurich (CH), January 15-16, 2020.
- 2019 "Predicting Offline Political Support with Online Social Behavior." Presentation at the European Conference on Social Networks 2019, EUSN, ETH Zurich, Zurich (CH), September 9-12, 2019.
- 2019 "Predicting Offline Political Support with Online Social Behavior." Poster presentation at the 3rd European Symposium on Societal Challenges in Computational Social Science, ETH Zurich, Zurich (CH), September 2-4, 2019.
- 2019 "Predicting Offline Political Support with Online Social Behavior." Presentation at the 12th Annual Political Networks Conference, Duke University, Durham NC (US), May 29 - June 1, 2019.
- 2019 "Disentangling Selection from Influence Effects in Social Networks Using Relational Event Models." Poster presentation at the 12th Annual Political Networks Conference, Duke University, Durham NC (US), May 29 - June 1, 2019.

- 2019 "Predicting Offline Political Support with Online Social Behavior." Presentation at the Network Science Society: NetSci 2019 conference, Complexity Center, Burlington VT (US), May 29, 2019.
- 2019 "Quantifying endogenous network statistics in network ensembles." Presentation at the NetSci2019 Satellite Workshop Statistical Inference for Network Models, Complexity Center, Burlington VT (US), May 27, 2019.
- 2019 "'Good' and 'Bad' Instruments: Evaluating Actors' Policy Preferences in Swiss Flood Risk Management." Presentation at the Annual Convention of the Swiss Political Science Association, ETH Zurich, February 14-16, 2019. Presented by the co-author.
- 2018 "Using an Automated Approach for the Identification of Coalitions in Policy Processes". Presentation at the annual conference of the Swiss Political Science Association, University of Geneva, Geneva (CH), February 5-6, 2018.
- 2017 "Predicting relational events". Presentation at the Third European Conference on Social Networks (EUSN), Johannes Gutenberg-University, Mainz (DE), September 26-29, 2017.
- 2017 "Information exchange in interwoven policy networks". Presentation at the Annual Convention of the Swiss Political Science Association, University of St. Gallen, St. Gallen (CH), January 12, 2017.
- 2017 "Predicting relational events". Presentation at the Annual Convention of the Swiss Political Science Association, University of St. Gallen, St. Gallen (CH), January 12, 2017.
- 2016 "Goodness-of-fit measures for temporal event network models". Poster presentation at the 33rd annual meeting of the Society for Political Methodology, Rice University, Houston (US), July 23, 2016.
- 2016 "Boundary Spanning across Adjacent Policy Subsystems: ActorIssue Relations in Swiss Water Politics". Presentation at the Annual Convention of the Swiss Political Science Association, University of Basel, Basel (CH), January 21 2016.
- 2015 "National Parliamentary Coordination after Lisbon: A Network Approach". Presentation at the PhD-colloquium for Public Policy and Regulation, Institute of Political Science, University of Bern, Bern (CH), October 20 2015.
- 2015 "Coordination patterns in policy debates". Presentation at the Brown Bag Seminar, Department of Politics and Public Administration, University of Konstanz, Germany, May 22 2015.
- 2014 "Studying behavioral mechanisms in the policy process and political discourse". Presentation at the Environmental Social Sciences Seminar, Department of Environmental Social Sciences, Eawag (Swiss Federal Institute of Aquatic Science and Technology), Dübendorf (CH), November 14 2014.
- 2014 "Studying behavioral mechanisms in the policy process and political discourse". Presentation at the Political Science Colloquium, Institute of Political Science, University of Bern, Bern (CH), October 13 2014.
- 2014 "Overlapping Subsystems. Identification and Integration of Fragmented Games in Swiss Water Politics. Project Overview". Presentation at the Seminar on Transboundary Water Management, University of Bern and University of Geneva, Cully (CH), October 10 2014.

Knowledge Transfer and Outreach (non-scientific audience)

- 2024 Research on Polarization. Online platform to share and discuss recent findings in and around polarization research. <https://polarizationresearch.discourse.group>
- 2021 Formal meeting with the **Swiss Parliamentary Services** to present the DemocraSci and SNF project (184963). Parliamentary Services (PS) in Bern, Switzerland, November 24, 2021. Participants: Philippe Schwab, Pierre-Hervé Freléchoz, Jacqueline Kucera, Simon Maag, Stefan Nellen (BAR), Prof. Dr. Simon Hug.
- 2019 Formal meeting with the **Head of Internal Affairs** to present the DemocraSci and SNF projects related to the creation of the Swiss Parliamentary Knowledge Graph. Bundeshaus, Bern, Switzerland, May 16, 2019. Participants: Jörg DeBernardi, Michael Gautschi, Jean-Louis Morard, Michael Kammerbauer, Beat Kuoni, Lukas Zollinger, Lukas Bruhin, Katharina Füglistner, Philippe Künzler, Stefan Nellen, Ruth Meier.
- 2019 Formal meeting with the **Federal Archives (BAR)** to present the DemocraSci and SNF projects related to the creation of the Swiss Parliamentary Knowledge Graph. Federal Archives, Bern, Switzerland, May 19, 2019. Participants: Philippe Künzler, Stefan Nellen.

Languages

German: mother tongue **English:** proficient **French:** advanced **Arabic:** beginner