







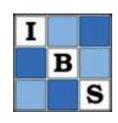
for Junior Researchers Conference

19th - 21st March 2025

**University Club Bonn** 

**Program and Poster list** 











# Program

## Wednesday 19th March 2025

08:00 - 09:00		Registration
09:00 - 09:15		Welcome
09:15 - 10:15		Session 1 - Epidemiology
		Chair: Benjamin Aretz
	Yangfan Li	Risk prediction using case-cohort samples: A scoping review
	Oxford, United Kingdom	and empirical comparison
	<b>Judith Vilsmeier</b> Ulm, Germany	Implication of the choice of time scales in survival analysis
	Bor Vratanar	Leveraging cancer incidence for lead time estimation in
	Ljubljana, Slovenia	cancer screening programmes
10:15 - 10:35		Coffee Break
10:35 - 11:35		Session 2 - Dynamic prediction models
10.35 - 11.35		Chair: Anders Munch
	Niklas Hagemann	Capturing subgroup-specific time-variation in covariate
	Cologne, Germany	effects in Cox-type hazard regression models
	Pedro Miranda Afonso	Dynamic prediction of survival benefit to inform liver
	Rotterdam, The Netherlands	transplant decisions in hepatocellular carcinoma
	<b>Mirko Signorelli</b> Leiden, The Netherlands	Dynamic prediction with numerous longitudinal predictors: How to combine the best of both worlds (landmarking and joint modelling) through penalized regression calibration
11:35 - 11:45		Short Break
		Keynote
11:45 - 12:45		Chair: Alina Schenk
	<b>Morten Overgaard</b> Aarhus, Denmark	Regression analysis with jack-knife pseudo-observations
12:45 - 13:45		Lunch Break
13:45 - 14:25		<b>Session 3 - Pseudo-observations</b> Chair: Alina Schenk
	<b>Simon Mack</b> Dortmund, Germany	Bootstrap-based inference for pseudo-value regression models
	<b>Nickson Murunga</b> Leicester, United Kingdom	Implications of pseudo-observations in prognostic modelling Addressing left truncation
14:25 - 18:00		Excursion: Mission Al, Deutsches Museum
18:00 - 20:00		Poster Session

## Thursday 20th March 2025

08:30 - 9:50		Session 4 - High-dimensional survival analysis and machine learning  Chair: Thomas Welchowski
	<b>Antoine Caillebotte</b> Paris, France	Estimation and variables selection in a joint model of survival times and longitudinal data with random effects
	<b>Riccardo De Santis</b> Siena, Italy	Sign-flip test for coefficients in the Cox regression model
	<b>Anders Munch</b> Copenhagen, Denmark	Targeted learning with right-censored data using the state learner
	<b>Simon Wiegrebe</b> Munich, Germany	Deep learning for survival analysis: A review
09:50 - 10:15		Coffee Break
10:15 - 11:35		<b>Session 5 - Cure models</b> Chair: Marta Cipriani
	<b>Morine Delhelle</b> Ottignies-Louvain-la-Neuve, Belgium	Copula based dependent censoring in cure models with covariates
	<b>Blanca E. Monroy-Castillo</b> A Coruña, Spain	Testing the effect of multiple covariates on cure rates in mixture cure models based on distance correlation
	<b>Beatriz Piñeiro-Lamas</b> A Coruña, Spain	The sicure R package: Single-index mixture cure models
	<b>Tsz Pang Yuen</b> Amsterdam, The Netherlands	Testing for sufficient follow-up in survival data with covariates
11:35 - 11:45		Short Break
11:45 - 12:45		<b>Keynote</b> Chair: Matthias Schmid
	<b>Nan van Geloven</b> Leiden, The Netherlands	Causal prediction of time-to-event outcomes
12:45 - 13:45		Lunch Break

13:45 - 15:05		<b>Session 6 - Causality</b> Chair: Yujun Xu
	<b>Niklas Maltzahn</b> Oslo, Norway	Robust estimation of occupation probabilities of latent multi-state processes
	<b>Ilaria Prosepe</b> Leiden, The Netherlands	Interventional dynamic updating of prognostic survival models in a pandemic environment
	<b>Alice Marion Richardson</b> Canberra, Australia	Surviving your PhD: An analysis of time to completion data
	<b>Sandra Schmeller</b> Ulm, Germany	A "what if"-interpretation of the Kaplan-Meier estimator and, in general, no such interpretation for competing risks
15:05 - 15:35		Coffee Break
15:35 - 16:55		Session 7 - Pharmaceutical statistics and clinical trials Chair: Sam Doerken
	<b>Lucia Ameis</b> Cologne, Germany	A non-parametric proportional risk model to assess a treatment effect in an application to randomized controlled trials
	<b>Moritz Fabian Danzer</b> Münster, Germany	Exhausting the type I error level in a group-sequential design with a closed testing procedure for progression-free and overall survival
	<b>Beatriz Farah</b> Paris, France	Sample size calculation based on differences of quantiles from right-censored data
	Chloé Szurewsky	One-sample survival tests for non-proportional hazards in
	Paris, France	oncology clinical trials: A simulation study
16:55 - 19:00		Evening Break
19:00 - 22:00		Conference dinner at Godesburg Castle

## Friday 21st March 2025

08:30 - 09:50		Session 8 - Parametric regression models Chair: David Köhler
	<b>Antoniya Dineva</b> Bielefeld, Germany	A "double copula" model for semi-competing risks data
	<b>Gilbert Kiprotich</b> Munich, Germany	Incorporation of a mixture distribution on frailty regression model for clustered survival data
	<b>Marilena Müller</b> Heidelberg, Germany	Comparing a time-to-event endpoint in a two-arm trial investigating personalized treatment
	<b>Thomas Welchowski</b> Zurich, Switzerland	R-package discSurv: A toolbox for discrete time survival analysis
09:50 - 10:15		Coffee Break
10:15 - 11:35		<b>Session 9 - Competing risks and multistate models</b> Chair: Pedro Miranda Afonso
	<b>Salvatore Battaglia</b> Palermo, Italy	Extending the vertical model: An alternative approach to competing risks with clustered data
	<b>Sam Doerken</b> Freiburg, Germany	Patient disposition in clinical trials: Addressing competing risks with stacked probability and proportion plots
	<b>Marta Spreafico</b> Leiden, The Netherlands	Discrimination performance in illness-death models with interval-censored disease data
	<b>Yujun Xu</b> Munich, Germany	Transitions, sojourns, and bias: Simulation insights for transplant strategies in leukemia
11:35 - 11:45		Short Break
11:45 - 12:45		<b>Keynote</b> Chair: Kathrin Möllenhoff
	<b>Dennis Dobler</b> Dortmund, Germany	Resampling options in survival and event history analysis
12:45 - 13:00		Closing Remarks, Best Talk and Poster Award

#### **Poster Contributions**

#### **Poster list**

- 1 Duoerkongjiang Alidan Methods for analyzing multiple time-to-event endpoints in randomized clinical trials: A comprehensive overview
- 2 Luzia Berchtold Reconstructing survival curves: Using imputation strategies to construct Kaplan-Meier estimates with no or limited data on survivors
- 3 Adriana Blanda Comparison of the prognostic performance of machine learning algorithms on gene expression data in acute myeloid leukemia
- 4 Oksana Chernova Building risk prediction models by synthesizing national registry and prevention trial data
- 5 Marta Cipriani Extending landmarking to mixture cure models with time-varying covariates
- 6 Hannah Louise Cooper Investigating the most suitable modelling framework to predict long-term restricted mean survival time and life expectancy
- 7 Inez De Batselier Introducing a flexible model for regression models with a leftcensored response and covariate
- 8 Lorenzo Del Castello An R function for data preparation for an acyclic multistate model with non-ordered intermediate states
- 9 Claudio Del Sole Principled estimation and prediction with competing risks: A Bayesian nonparametric approach
- 10 Maryam Farhadizadeh Enhancing healthcare understanding from clinical routine data by simplifying the representation of treatment pathways
- 11 Jannis Guski Does a SARS-CoV-2 infection increase the risk of dementia? An application of causal time-to-event analysis on real-world patient data
- 12 Toby Hackmann Effective sample size for Cox models: A measure of individual uncertainty in survival predictions
- 13 Natalia Hong Imputation free deep survival prediction using conditional variational autoencoders
- 14 Udeerna Ippagunta Planning early-phase clinical trials in oncology: A comprehensive simulation approach for response, progression-free survival, and overall survival
- 15 *Tijn Jacobs* A nonparametric Bayesian approach for high-dimensional causal effect estimation in survival analysis

- 16 Lukas Klein Do commonly used machine learning implementations allow for IPCW to address censoring? A closer look at scikit-learn
- 17 Luca Kleineidam Life expectancies and blood-based biomarkers for Alzheimer's disease in primary care
- 18 Zoe Kristin Lange Testing the similarity of healthcare pathways based on transition probabilities A new bootstrap procedure
- 19 Sara Matijevic Prediction stability of survival models
- 20 Mequanent Mekonen Bayesian joint modeling of bivariate longitudinal and timeto-event data: With application of micro and macro vascular complication in people with type 2 diabetes and hypertension
- Johan Sebastian Ohlendorff A pragmatic approach to the estimation of the interventional absolute risk in continuous time
- 22 Leonardo Perotti Modeling the early-redemption of fixed interest rate mortgages: A survival analysis approach
- 23 Eliz Peyraud Improving Cox regression estimates by using the stochastic approximation expectation-maximization algorithm to handle missing data
- 24 James Salsbury Assurance methods for designing a clinical trial with a delayed treatment effect
- 25 Justine Sauce CORALE project: Cumulative lifetime multi-exposures to ionising radiation and other risk factors and associations with chronic diseases in the CONSTANCES cohort
- 26 Lena Schemet Bootstrapping LASSO-type estimators in Cox frailty models
- 27 Julian Schlecker Propagator methods for survival analysis
- 28 Sebastian Schwick Multi-state models for individualized treatment response prediction and risk assessment in multiple myeloma
- 29 Fiete Sieg Double-truncated and censored corporate lifetimes: Likelihood and identification
- 30 Henrik Stahl Combining machine learning methods for subgroup identification in time-to-event data with approximate Bayesian computation for bias correction
- 31 Lubomír Štěpánek Machine learning for survival analysis: Predicting time-to-event through decomposition
- 32 Lubomír Štěpánek A machine learning approach for comparing multiple survival curves: Random forests with reduced assumption dependency
- Ferdinand Valentin Stoye Increasing flexibility for the meta-analysis of full ROC curves
   A copula approach
- 34 John Zobolas A pareto-driven ensemble feature selection approach optimizes biomarker discovery in multi-omics pancreatic cancer studies