



15

Faculty
Members



37%

women



2/5

personnel paid
from 3rd party
funds



61

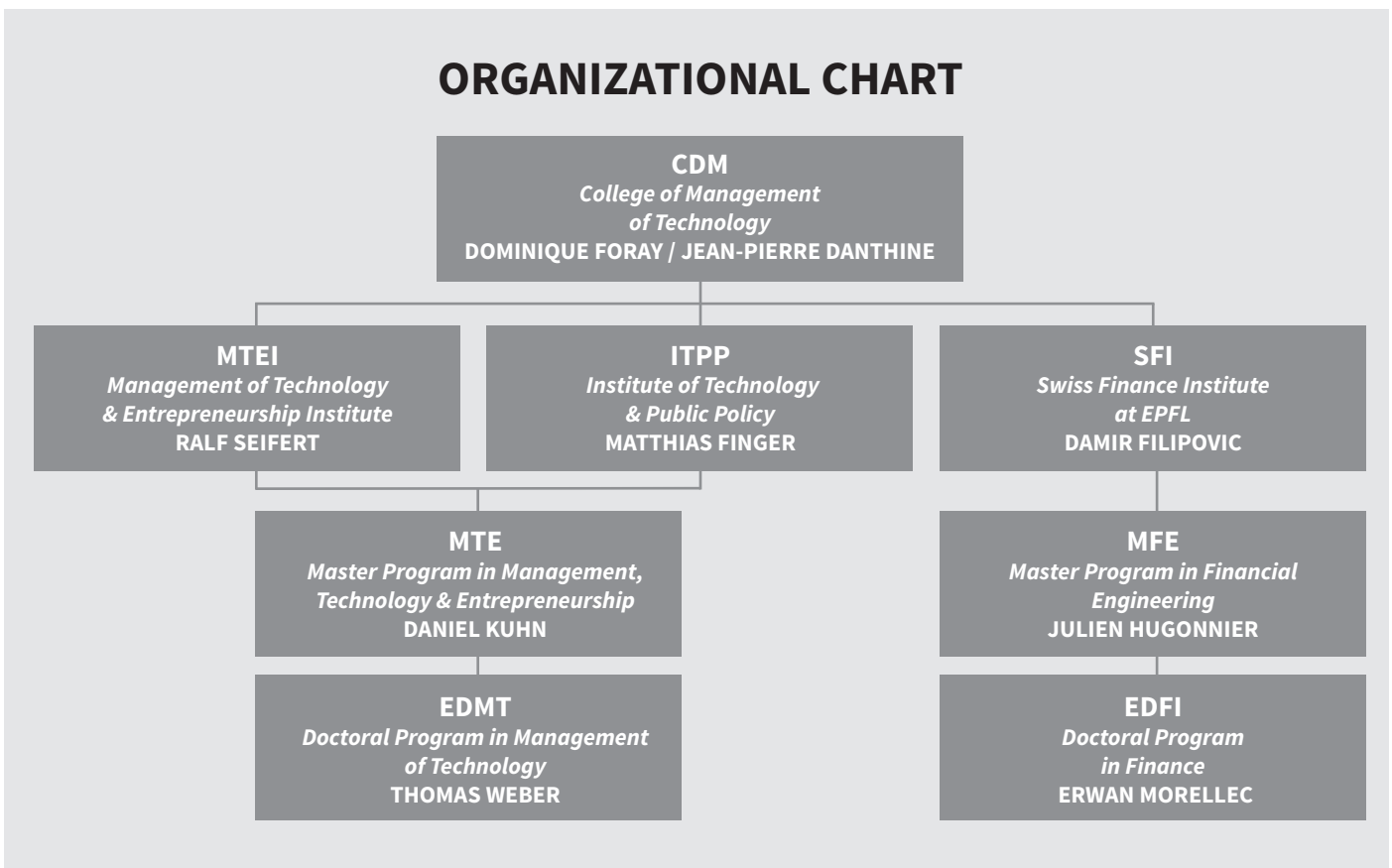
Total Master
graduates



49

Number of
organized
seminars

ORGANIZATIONAL CHART



FOCAL AREAS

MANAGEMENT

- Optimization
- Business analytics
- Entrepreneurial strategies
- Management of innovation
- Technology commercialization
- Operations & supply chain management

POLICY

- Energy policy
- Environmental policy
- Green economy
- IP policy
- Technology policy
- Transport policy

FINANCE

- Asset pricing
- Corporate finance
- Financial economics
- Financial engineering
- Macroeconomics
- Risk management



PROFESSORS & EXPERTISE 2018

MTEI – Management of Technology & Entrepreneurship Institute



MARC GRUBER

Full Professor
Chair of Entrepreneurship & Technology
Commercialization (ENTC)

Key words

- Entrepreneurship
- Technology commercialization
- Innovation
- Strategic management
- Public policy



THOMAS WEBER

Associate Professor
Chair of Operations, Economics & Strategy (OES)

Key words

- Credit collections
- Decision making under risk
- Economics (behavioral, environmental, theory)
- Engineering economy
- Investment criteria
- Nonlinear systems
- Optimal control
- Risk
- Sharing economy



DANIEL KUHN

Full Professor
Chair of Risk Analytics & Optimization (RAO)

Key words

- Decision-making under uncertainty
- Stochastic programming & robust optimization
- Uncertainty quantification



PHILIPPE WIESER

Adjunct Professor
Chair of Logistics, Economics & Management (LEM)

Key words

- Supply chain strategies
- Digital supply chain
- Supply chain innovation
- Flows and resources optimization
- Management of hospital systems
- Project management



RALF SEIFERT

Full Professor
Chair of Technology & Operations
Management (TOM)

Key words

- Supply chain strategy
- Supply chain finance
- Technology network management and entrepreneurship



KENNETH YOUNG

Associate Professor
Chair of Technology & Innovation Strategy (TIS)

Key words

- Strategic management
- Technology and innovation strategy
- Employee mobility
- New venture creation
- Data science



CHRISTOPHER TUCCI

Full Professor
Chair of Corporate Strategy & Innovation
(CSI)

Key words

- Entrepreneurship and corporate venture capital
- Business model innovation
- Technology strategy
- Technological entry, product development, and «creative destruction»
- Technology policy
- Internet strategy of entrants and incumbents
- «Crowdsourcing» / Web2.0 and innovation
- Corporate governance and innovation

ITPP – Institute of Technology & Public Policy



MATTHIAS FINGER

Full Professor
Swiss Post Chair in Management of Network Industries (MIR)

Key words

- De-and regulation of network industries
- Governance of large socio-technical systems
- Infrastructure policy, business-government relations



BRUNO OBERLE

Adjunct Professor
Chair of Green Economy & Resource Governance (GERG)

Key words

- Green economy
- Environmental governance
- Sustainability transitions



DOMINIQUE FORAY

Full Professor
Chair of Economics & Management of Innovation (CEMI)

Key words

- Economics of innovation
- Science and technology indicators
- Technology policy
- Knowledge-based economy
- Innovation & development
- Smart specialization



GAËTAN DE RASSENFOSSE

Assistant Professor (Tenure Track)
Chair of Innovation & IP Policy (IIPP)

Key words

- Economics of innovation
- Intellectual property policy
- Science of science

SFI – Swiss Finance Institute



PIERRE COLLIN-DUFRESNE

Full Professor
Professor of Finance

Key words

- Credit & liquidity risk
- Optimal asset allocation
- Pricing & hedging



JULIEN HUGONNIER

Associate Professor
Professor of Finance

Key words

- Asset pricing theory
- Dynamic corporate finance
- Decision making under uncertainty



JEAN-PIERRE DANTHINE

Adjunct Professor
Professor of Finance

Key words

- Central banking
- Financial crisis
- Business cycle and growth
- Regulation



LUISA LAMBERTINI

Full Professor
Chair of International Finance (CFI)

Key words

- Macroeconomics
- International finance
- Monetary & fiscal policy



RÜDIGER FAHLENBRACH

Associate Professor
Professor of Finance

Key words

- Corporate finance & governance
- Causes & consequences of the recent financial crisis
- Banking regulation



SEMYON MALAMUD

Associate Professor
Professor of Finance

Key words

- Portfolio selection
- Non-linear filtering
- Liquidity and asset prices



DAMIR FILIPOVIC

Full Professor
Swissquote Chair in Quantitative Finance

Key words

- Quantitative finance
- Risk & insurance
- Quantitative risk management



ERWAN MORELLEC

Full Professor
Professor of Finance

Key words

- Real options
- Financing & capital structure decisions
- Liquidity management
- Risk management
- Economics of innovation et corporate governance



PERSONNEL BY CATEGORY (FTE)

	TOTAL	% WOMEN	BUDGETARY FUNDS	3RD PARTY FUNDS
Professors	14.9	7%	13	2
Full professors	9.2	11%	7.3	2
Associate professors	4.7	0%	4.7	0
Assistant professors	1	0%	1	0
Scientific staff	65.45	32%	33	32.5
Adjunct professors	2.5	0%	1.5	1
Senior scientists / postdocs	16.45	38%	7	9.5
PhD students	46.5	31%	24.5	22
Administrative & technical staff	21.2	75%	15.4	5.8
Administrative staff	17.2	92%	12.4	4.8
Technical staff	3	0%	3	0
Apprentices	1	0%	0	1
Total	101.55	37%	61.40	40.15



EDUCATION

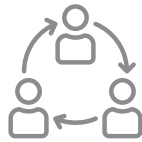
Master Programs (MFE-MTE)

Academic Year 2017/2018

MTE
Management, Technology
& Entrepreneurship

MFE
Financial Engineering

Applications	202	175
Admissions	49	56
Enrollments	34	26
With an EPFL degree	16	6
Minor Students	235	24
Exchange students	23	5



MTE

Management, Technology
& Entrepreneurship



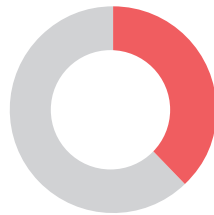
MFE

Financial Engineering



Gender

Female/Total: 13/34 (38%)

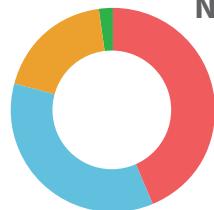


Female/Total: 6/26 (23%)

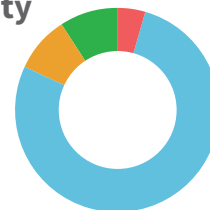


Nationality

Switzerland	7 (21%)
Europe without Switzerland	17 (50%)
Asia	9 (26%)
Africa	1 (3%)



Switzerland	1 (4%)
Europe without Switzerland	18 (69%)
Asia	2 (8%)
Africa	2 (8%)

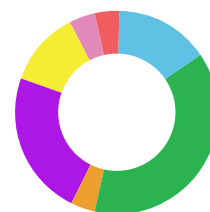


Educational background

Physics	2 (6%)
Mechanical eng.	1 (3%)
Mathematics	4 (12%)
Materials science & eng.	2 (6%)
Life sciences & technol. & bioeng.	3 (9%)
General engineering	5 (14%)
Electrical eng. & electronics	1 (3%)
Economics & finance	2 (6%)
Computer science & com. systems	5 (14%)
Civil eng. & Environmental eng.	6 (18%)
Chemistry & chemical eng.	3 (9%)
Others	3 (9%)

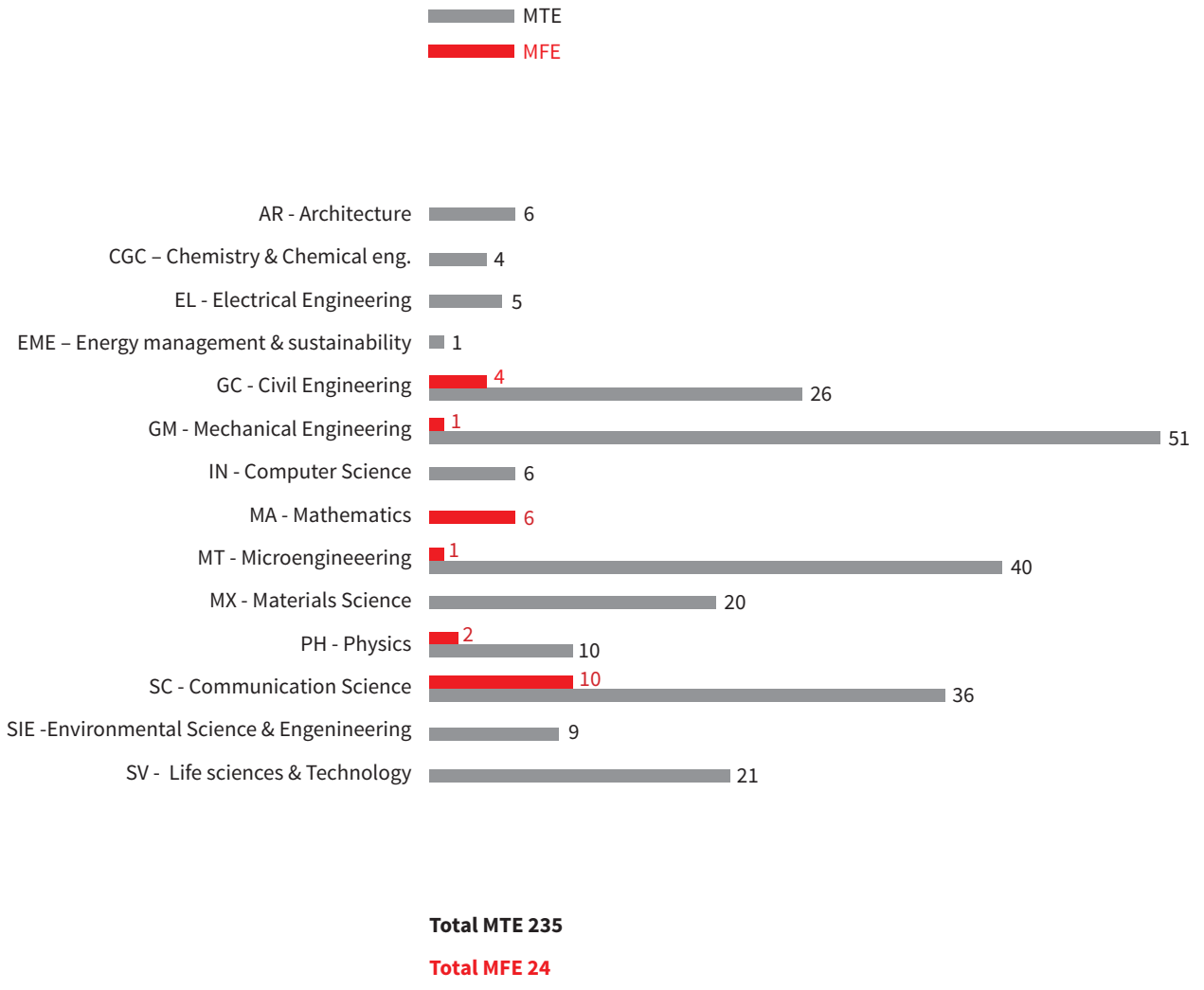


Physics	4 (15%)
Mathematics	10 (38%)
Mechanical eng.	1 (4%)
General engineering	6 (23%)
Computer science & com. systems	3 (12%)
Economics & finance	1 (4%)
Others	1 (4%)





MTE & MFE Minor students by EPFL section





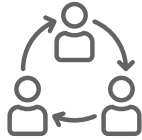
Doctoral Programs (EDFI, EDMT)

SEPTEMBER 2018

EDMT
Management of Technology

EDFI
Financial engineering

Applications	233	215
Enrollments	6	3



EDMT

Management, Technology & Entrepreneurship



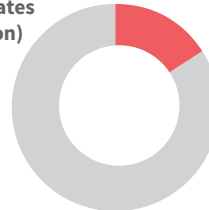
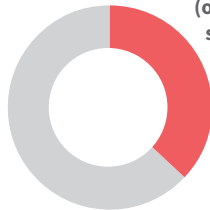
EDFI

Financial Engineering



Gender
(overall graduates since inception)

Female/Total : 44/118 (37%)

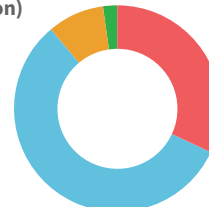
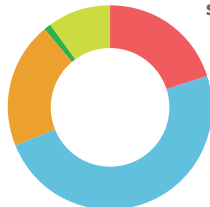


Female/Total : 7/44 (16%)



Nationality
(overall graduates since inception)

Switzerland	24 (20%)
Europe without Switzerland	58 (49%)
Asia	23 (20%)
Africa	1 (1%)
Americas	12 (10%)

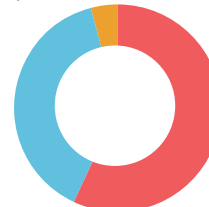
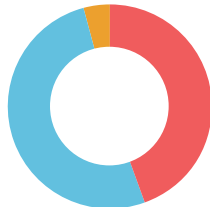


Switzerland	14 (32%)
Europe without Switzerland	25 (57%)
Asia	4 (9%)
Africa	1 (2%)



Career
(overall graduates since inception)

Academic	25 (44%)
Industry	40 (51%)
Public Organization	4 (5%)



Academic	13 (57%)
Industry	9 (39%)
Public Organization	1 (4%)

7



3

Number of Thesis awarded in 2018



MOOCS

Running / Ending

MOOC Name	Professor in charge
Management of Urban Infrastructures	Matthias Finger
Smart Cities – Management of Smart Urban Infrastructures	Matthias Finger
Launching New Ventures (English, French & Chinese versions)	Christopher Tucci and Marc Gruber
Designing a Smart Specialisation Strategy (English & French versions) (1 st “pay to get in” MOOC of EPFL)	Dominique Foray
Interest Rate Models	Damir Filipovic
Find the right markets for your innovation - A tool for entrepreneurs and innovators for choosing which markets to play in.	Marc Gruber and Sharon Tal
Global Arctic	Matthias Finger

In preparation

MOOC Name	Professor in charge
Engineering Economy	Thomas Weber
Social Entrepreneurship	Marc Gruber, Julia Binder and Nettra Pan



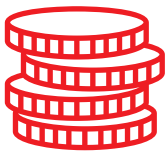
Executive Education

Executive Masters

Program Name	Since	Average number of students per class	Graduates students since inception
Global Supply Chain Management	1993	20-25	over 1200
EPFL Executive MBA (EPFL EMBA)	1998	30	593
Innovative Governance of Large Urban Systems (IGLUS)	2014	20	27

Certificates of Advanced Studies

Global Supply Chain Management (10 ECTS)
 Healthcare Supply Chain Management (12 ECTS)
 Management of Biotech, Medtech, Pharma Ventures (10 ECTS)



Expenditures in 2018

Federal funds	10 299 293	67%
Executive education / MOOC's	1 392 999	9%
Sponsored chairs	2 050 781	13%
SNSF	991 020	6%
Industry grants	326 955	2%
European programs	216 752	1%
Innosuisse (SCCER)	52 507	0.3%
Total	15 330 307	100%



Publications

Journals

The CDS-bond basis. J. Bai, **P. Collin-Dufresne**. Financial Management, vol. 42(2), pp. 417-439. 2018.

Activism, strategic trading, and liquidity. K. Back, **P. Collin-Dufresne**, V. Fos, T. Li, A. Ljungqvist. Econometrica, vol. 86(4), pp. 1431-1463. 2018.

Equilibrium commodity prices with irreversible investment and non-linear technologies. J. Casassus, **P. Collin-Dufresne**, B.R. Routledge. Journal of Banking and Finance, vol. 95, pp. 128-147. 2018.

On the rewards to international investing: a safe haven currency perspective. **JP. Danthine**, S. Danthine. Swiss Journal of Economics and Statistics, vol 154(1), article 14. 2018.

Negative interest rates in Switzerland: What have we learned? **JP. Danthine**. Pacific Economic Review, vol. 23(1), pp. 43-50. 2018.

Scenario-based system dynamics modeling for the cost recovery of new energy technology deployment: The case of smart metering roll-out. **A. Dehdarian**. A Journal of Cleaner Production, vol. 178, pp. 791-803. 2018.

Why does fast loan growth predict poor performance for banks? **R. Fahlenbrach**, R. Prilmeier, R.M. Stulz. Review of Financial Studies, vol. 31 (3), pp. 1014-1063. 2018.

On the American swaption in the linear-rational framework. **D. Filipović**, Y. Kitapbayev. Quantitative Finance, vol. 18(11), pp. 1865-1876. 2018.

Exact smooth term structure estimation. **D. Filipović**, S. Willems. SIAM Journal on Financial Mathematics, vol. 9(3), pp. 907-929. 2018.

The Jacobi Stochastic Volatility Model. D. Akerer, **D. Filipović**, S. Pulido. Finance and Stochastics, vol. 22(3), pp. 667-700. 2018.

Asset-liability management for long-term insurance business. H. Albrecher, D. Bauer, P. Embrechts, **D. Filipović**, P. Koch-Medina, R. Korn, S. Loisel, A. Pelsser, F. Schiller, H. Schmeiser, J. Wagner. European Actuarial Journal, vol. 8(1), pp. 9-25. 2018.

Replicating portfolio approach to capital calculation. M. Cambou, **D. Filipović**. Finance and Stochastics, vol. 22 (1), pp. 181-203. 2018.

The «Global Arctic» as a new geopolitical context and method. L. Heininen, **M. Finger**. Journal of Borderlands Studies, vol. 33 (2), pp. 199-202. 2018.

- Smart governance for smart cities. M. Razaghi, **M. Finger**. Proceedings of the IEEE, vol. 106 (4), pp. 680-689. 2018.
- The development of Mobility-as-a-Service in the Helsinki metropolitan area: a multi-level governance analysis. M. Audouin, **M. Finger**. Research in Transportation Business and Management, vol. 27, pp. 24-35. 2018.
- Smart specialization strategies and industrial modernization in European regions – theory and practice. **D. Foray**. Cambridge Journal of Economics, vol. 42(6), pp. 1505-1520. 2018.
- Smart specialization strategies as a case of mission-oriented policy – a case study on the emergence of new policy practices. **D. Foray**. Industrial and Corporate Change, vol. 27 (5), pp. 817–832. 2018.
- Calibration to American options: numerical investigation of the de-Americanization method. O. Burkovska, M. Gass, **K. Glau**, M. Mahlstedt, W. Schoutens, B. Wohlmuth. Quantitative Finance, vol. 18(7), pp. 1091-1113. 2018.
- Absolute continuity of semimartingales. D. Criens, **K. Glau**. Electronic Journal of Probability, vol. 23(125). 2018.
- The role of teams in academic spin-offs. A. Nikiforou, T. Zabara, B. Clarysse, **M. Gruber**. Academy of Management Perspectives, vol. 32(1), pp. 78-100. 2018.
- New ways of seeing: Radical theorizing. S. Nadkarni, **M. Gruber**, K. DeCelles, B. Connelly, M. Baer. Academy of Management Journal, vol. 61(2), pp. 371-377. 2018.
- From the editors a brief primer on data visualization opportunities in management research. G. Ertug, **M. Gruber**, A. Nyberg, H.K. Steensma. Academy of Management Journal, vol. 61(5), pp. 1613-1625. 2018.
- Robust auction design under multiple priors by linear and integer programming. **C. Kocycigit**, HI Bayrak, MC Pinar. Annals of Operations Research, vol. 260, pp. 233-253. 2018.
- Chebyshev inequalities for products of random variables. N. Rujeerapaiboon, **D. Kuhn**, W. Wiesemann. Mathematics of Operations Research, vol. 43(3), pp. 887-918. 2018.
- Conic programming reformulations of two-stage distributionally robust linear programs over Wasserstein balls. G. Hanasusanto and **D. Kuhn**. Operations Research, vol. 66(3), pp. 849-869. 2018.
- Data-driven distributionally robust optimization using the Wasserstein metric: Performance guarantees and tractable reformulations. P. Mohajerin Esfahani, **D. Kuhn**. Mathematical Programming, vol. 171(1-2), pp. 115-166. 2018.
- Data-driven inverse optimization with incomplete information. P. Mohajerin Esfahani, S. Shafieezadeh Abadeh, G. Hanasusanto, **D. Kuhn**. Mathematical Programming, vol. 167(1), pp. 191-234. 2018.
- Decision rule bounds for two-stage stochastic bilevel programs. I. Yanikoglu, **D. Kuhn**. SIAM Journal on Optimization, vol. 28(1), pp. 198-222. 2018.
- From infinite to finite programs: explicit error bounds with applications to approximate dynamic programming. P. Mohajerin Esfahani, T. Sutter, **D. Kuhn**, J. Lygeros. SIAM Journal on Optimization, vol. 28(3), pp. 1968-1998. 2018.
- Taking Advantage of the Vastly Underused European Biogas Potential: Break-Even Conditions for a Fuel Cell and an Engine as Biogas Converters. S. Majerus, **D. Lauinger**, J. Van herle. Journal of Electrochemical Energy Conversion and Storage, vol. 15(3). 031006-031006-7, 2018.
- Un algorithme pour battre le record du Swiss Train Challenge : poser le pied dans chacun des 26 cantons le plus rapidement possible en utilisant uniquement des transports publics. E. Clédat, **D. Lauinger**. Revue XYZ, vol. 157, pp. 30-36. 2018.
- Hedge or rebalance: optimal risk management with transaction costs. F. Gallien, S. Kassibrakis, **S. Malamud**. Risks, vol. 6(4), pp. 112. 2018.
- Non-myopic betas. **S. Malamud**, G. Vilkov. Journal of Financial Economics, vol. 129(2), pp. 357-381. 2018.
- Agency conflicts around the world. E. Morellec, B. Nikolov, N. Schürhoff. Review of Financial Studies, vol. 31(11), pp. 4232-4287. 2018.
- Innovation complementarities and firm growth. S. Bianchini, **G. Pellegrino**, F. Tamagni. Industrial and Corporate Change, vol. 27(4), pp. 657-676. 2018.

Barriers to innovation in young and mature firms.

G. Pellegrino. Journal of Evolutionary Economics, vol. 28(1), pp. 181-206. 2018.

A time to nourish? Evaluating the impact of public procurement on technological generality through patent data. **E. Raiteri**. Research Policy, vol. 47(5), pp. 936-952. 2018.

Econometric evidence on the depreciation of innovations. **G. de Rassenfosse**, AB. Jaffe. European Economic Review, vol. 101, pp. 625-642. 2018.

- Are patent fees effective at weeding out low-quality patents? **G. de Rassenfosse**, AB. Jaffe. Journal of Economics & Management Strategy, vol. 27(1), pp. 134-148. 2018.

Roles of inventory and reserve capacity in mitigating supply chain disruption risk. F. Lücker, **R. W. Seifert** and I. Biçer. International Journal of Production Research, vol. 57(4), pp. 1238-1249. 2018.

Optimal replenishment cycle for perishable items facing demand uncertainty in a two-echelon inventory system. M. Kirci, I. Biçer, **R.W. Seifert**. International Journal of Production Research, vol. 57(4), pp. 1250-1264. 2018.

Business models and complexity. L. Massa, **G. Viscusi**, **C. Tucci**. Journal of Business Models, vol. 6(1), pp. 59-71. 2018.

Translating science into business innovation: the case of open food and nutrition data hackathons. **C. Tucci**, **G. Viscusi**, H. Gautschi. Frontiers in Nutrition, vol. 5 (96), pp. 1-6. 2018.

Heuristic policies for the stochastic economic lot sizing problem with remanufacturing under service level constraints. OA. Kilic, **H. Tunc**, SA. Tarim. European Journal of Operational Research, vol. 267(3), pp. 1102-1109. 2018.

Digital information asset evaluation: a case study in manufacturing. C. Batini, M. Castelli, **G. Viscusi**, C. Capiello et al. ACM SIGMIS Database: the DATABASE for Advances in Information Systems, vol. 49(3), pp. 19-33. 2018.

A linear-quadratic Gaussian approach to dynamic information acquisition. **T. A. Weber** and V-A. Nguyen. European Journal of Operational Research, vol. 270(1), pp. 260-281. 2018.

Optimal information-collection policies in a Markov decision process framework. L.E. Cipriano, J.D. Goldhaber-Fiebert, S. Liu, **T.A. Weber**. Medical Decision Making, vol. 38(7), pp. 797-809. 2018.

Population-level intervention and information collection in dynamic healthcare policy. L.E. Cipriano and **T.A. Weber**. Health Care Management Science, vol. 21(4), pp. 604-631. 2018.

The digital transformation of vertical organizational relationships. R.J. Kauffman, **T.A. Weber**. Journal of Management Information Systems, vol. 35(3), pp. 837-839. 2018.

Competitive pressure on the rate and scope of innovation. **K.A. Younge**, T.W.Tong. Journal of Economic Behavior and Organization, vol 150, pp. 162-181. 2018.

Books & Book Chapters

Risk Taking Incentives and the Great Financial Crisis, in The 10 Years After: The End of the Familiar... Reflections on the Great Economic Crisis. **JP Danthine**. Edited by Marc Uzan, Reinventing Bretton Woods Committee, NY, NY, 2018.

Natural resources and the resource - based view. B. Bastian, **C. L. Tucci**, U. Richter, G. George and S. J. D. Schillebeeckx. In: Managing natural resources: organizational strategy behaviour, and dynamics. 2018.

Three's a crowd? **G. Viscusi**, **C. L. Tucci** and A. Afuah. In: Creating and capturing value through crowdsourcing, 384. 2018.

Creating and capturing value through crowdsourcing. A. Afuah, **C. L. Tucci** and **G. Viscusi**. Oxford, Oxford University Press, 2018.

Economie de la Connaissance. **D. Foray**. 2018.

The Governance of Smart Transportation Systems: new organizational structures for mobility **M. Finger** and M. Audoin (eds). Berlin, Springer, 2018.

The Global Arctic Handbook **M. Finger** and Lassi Heininen (eds). Berlin, Springer, 2018.

Institutions, Organizations, and Technological Innovations: The Dynamic Development of Smart Ticketing Schemes in London's Urban Transportation System. **M. Finger** and M. Audoin. In: M. Finger, M. and M. Audouin (eds). The Governance of Smart Transportation Systems: new organizational structures for mobility. Berlin, Springer, chapter 10, pp. 189-206. 2018.

State-owned enterprises in the Arctic **M. Finger** and A. Krivorotov. In: M. Finger, and L. Heininen (eds.). The Global Arctic Handbook. Berlin, Springer, pp. 45-62. 2018.

Nicht so Good Governance in den Schweizer Netzwerkindustrien, **M. Finger**. In Kaufmann, R. & S. Rechsteiner (eds.). Governance der Energiewende. Zürich, Stämpfli Verlag, pp. 95-102. 2018.

Zielkonflikte ei den Stadtwerken **M. Finger** and S. Mühlemeier, in Kaufmann, R. & S. Rechsteiner (eds.). Governance der Energiewende. Zürich, Stämpfli Verlag, pp. 133-142. 2018

What can the South learn from the North regarding the implementation of IoT Solutions in Cities? The case of Seoul-born smart transportation card implementation in Bogota. **M. Finger** and M. Audouin In: Hostettler, S., Najih Besson, S. and J.-C. Bolay (eds.) (2018). Technologies for Development. Berlin, Springer, pp. 165-174. 2018.

Infrastructures as common pool resources. **M. Finger** and R. Künneke. In: Cole, Daniel H., and Michael D. McGinnis (eds). Elinor Ostrom and the Bloomington School of Political Economy: Volume 4, Policy Applications and Extensions. Lanham, MD, Lexington Books, pp. 233-245. 2018.

System Dynamics Simulation to Explore Impact of Low European Electricity Prices on Swiss Generation Capacity Investment. **M. Finger**, R. Verhoog and Paul van Baal. In: Dorsman, A., Ediger., V. and M.B. Kahan (eds.). Energy Economy, Finance and Geostrategy. Berlin, Springer, chapter 3, pp.31-62. 2018.



PhD Theses

IT Investment and its impacts does IT matter during crisis, during financing and in Innovation? **S. Hasan**, C. L. Tucci (Dir.), EPFL Lausanne. 2018.

Routines and practices in cross-boundary creative projects. **G. Baldessarelli**, C. L. Tucci (Dir.), EPFL Lausanne. 2018.

For their own good and for the good of others: identity duality in new venture evaluation and investor decision-making. **N. D. Pan**, M. Gruber (Dir.), EPFL Lausanne. 2018.

Three methodological contributions towards modelling endogenous policy-emergence in societal transitions. **R. Verhoog**, M. Finger (Dir.), EPFL Lausanne. 2018.

Towards Mobility-as-a-Service: a cross-case analysis of public authorities' roles in the development of ICT-supported integrated mobility schemes. **M. Audouin**, M. Finger (Dir.), EPFL, Lausanne. 2018.

Resilience and agency in mature sustainability transitions. Theoretical conceptualisation and empirical analysis of actor- and system-level dynamics in sociotechnical energy systems. **S. Mühlemeier**, M. Finger and Claudia Binder (Dir.). EPFL, Lausanne, 2018.

Essays in corporate finance. **Thomas Geelen**, Julien Hugonnier and Erwan Morellec (Dir.). EPFL, Lausanne, 2018.

Equilibrium Models for Derivatives Markets with Frictions. **Yuan Zhang**. Semyon Malamud (Dir). EPFL, Lausanne, 2018.

Essays in Financial Economics. **Julien Blatt**. Semyon Malamud (Dir). EPFL, Lausanne, 2018.

