

PERSONAL INFORMATION Chiara Tommasi

WORK EXPERIENCE

- From 2006 - to now** **Associate Professor in Statistics**
 Department of Economics, Management and Quantitative Methods of the University of Milan (via Conservatorio, 7, 20122 Milano, Italy)

 - Teaching and research activities.
 - From 2017 to now, Coordinator of the Bachelor degree “Economia e Management”.
- From 2002 - to 2006** **Ph.D. Researcher in Statistics**
 Department of Economics, Management and Quantitative Methods of the University of Milan

 - Teaching and research activities.
- From 2001 - to 2002** **Two-year post-doctorate scholarship in Statistics**
 University of Padova, Italy.

 - Research activities on Optimal design of experiments and on Double sampling in finite populations.

EDUCATION AND TRAINING

- November 6, 2014** **National Scientific Habilitation for full professor in Statistics**
February 14, 2001 **Ph.D. in Statistics**
 University of Padua (Italy)

 - Thesis on Optimal Design of Experiments
- September 2000 to February 2001** **Collaboration with the Pediatric Cancer Ward**
 Civil Hospital of Padova (Italy)
- October 17, 1997** **Master degree in Statistics**
 University of Padua (Italy)

 - Thesis on Empirical Likelihood (110/110 cum laude).

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	B2	B2	C1
Spanish	C1	C1	C1	C1	B1

Communication skills ▪ good communication skills gained through my experience as a professor

Organisational / managerial skills ▪ leadership (currently coordinator of a Bachelor Degree in Economics and Management)

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Independent user	Proficient user

- good command of LaTeX gained by writing research papers.
- Independent user of office suite (word processor, spread sheet, presentation software)
- Independent user of Mathematica and R.

Driving licence Driving licence category B

ADDITIONAL INFORMATION

Peer reviewed papers

- Deldossi L., Osmetti, S. Tommasi, C. (2018). Optimal design to discriminate between rival copula models for a bivariate binary response. *Test* (Epub ahead of print).
- Aletti G., May C. and Tommasi C. (2016). Best Estimation of Functional Linear Models. *Journal of Multivariate Analysis*, 151, 54-68.
- Aletti G., May C. and Tommasi C. (2016). KL-optimum designs: theoretical properties and practical computation. *Statistics and Computing*, 26(1), 107-117.
- Tommasi C., Martín-Martín R. and López-Fidalgo J. (2016). Max-min optimal discriminating designs for several statistical models. *Statistics and Computing*, 26(6), 1163-1172.
- May C., Tommasi C. (2014). Model selection and parameter estimation in non-linear nested models: a sequential generalized DKL-optimum design. *Statistica Sinica*, 24, 63-82.
- Tommasi, C., Rodríguez-Díaz J.M. and Santos-Martín M.T. (2014) Integral Approximations for computing optimum designs in random effect logistic regression models. *Computational Statistics and Data Analysis*, 71, 1208-1220.
- Tommasi, C. (2012) Optimal Design Robust to a Misspecified Model. *Communications in Statistics - Simulation and Computation*, 41(7), 1220-1231.
- Tommasi, C. and López-Fidalgo, J. (2010) Bayesian optimum designs for discriminating between models with any distribution. *Computational Statistics and Data Analysis*, 54, 143-150.
- Tommasi, C. (2009) Optimal designs for both model discrimination and parameter estimation. *Journal of Statistical Planning and Inference*, 139, 4123-4132.
- López-Fidalgo, J., Tommasi, C. and Trandafir, P.C. (2008). Discrimination between some extensions of the Michaelis-Menten model. *Journal of Statistical Planning and Inference*, 138, 3797-3804.
- López-Fidalgo, J., Tommasi, C. and Trandafir, P.C. (2007). An optimal experimental design criterion for discriminating between non-Normal models. *Journal of the Royal Statistical Society (B)*, 69 (2), 1-12.
- Diana, G., Tommasi, C. and Preo, P. (2007). Multi-Phase Sampling under cost constraints. *Statistical Methods and Applications*, 16, 309-319.
- Tommasi, C. and López-Fidalgo, J. (2004). Minimax designs for a particular parametrization of binary response models. *Communications in Statistics Theory and Methods*, 33-11, 2787-2798.
- López-Fidalgo, J. and Tommasi, C. (2004). Construction of MV- and SMV-optimum designs for binary response models. *Computational Statistics and Data Analysis*, 44, 465-475.
- Diana, G. and Tommasi, C. (2004). Estimation for finite population variance in double sampling. *Metron*, LXII-2, 223-232.
- Diana, G. and Tommasi, C. (2004). Optimal use of two auxiliary variables in double sampling, *Statistical Methods and Applications*, 13-3, 275-284.
- Diana, G. and Tommasi, C. (2003). Optimal estimation for finite population mean in two phase sampling, *Statistical Methods and Applications*, 12-1, 41-48.
- Diana, G. and Tommasi, C. (2002). Cross-validation Methods in Principal Components: a comparison, *Statistical Methods and Applications*, 11-1, 71-82.
- Diana, G. and Tommasi, C. (1999) Confidence intervals for population variance with known mean, *Metron*, 1-2, 37-50.

Chapters/Books

- López-Fidalgo, J., Tommasi, C. (2018). Optimal Experimental Design for Model Selection: A Partial Review. In: *The Mathematics of the Uncertain: A Tribute to Pedro Gil*. p. 253-263, Springer, ISBN: 9783319738475.
- L. Deldossi, S. Osmetti, C. Tommasi (2016). PKL-optimality criterion in copula models for efficacy-toxicity response. In: J. Kunert; C.H. Muller; A.C. Atkinson (Eds): *mODa 11 - Advances in Model-Oriented Design and Analysis*. Springer, 79-86, ISBN: 978-3-319-31264-4.
- G. Aletti, C. May, C. Tommasi (2016). On applying optimal designs of experiments when functional observations occur. In: J. Kunert; C.H. Muller; A.C. Atkinson (Eds): *mODa 11 - Advances in Model-Oriented Design and Analysis*. Springer, 1-9, ISBN: 978-3-319-31264-4.
- G. Aletti, C. May, C. Tommasi (2013). A Convergent Algorithm for Finding KL-Optimum Designs and Related Properties. In: D. Ucinski; A.C. Atkinson; M. Patan (Eds): *mODa 10 - Advances in Model-Oriented Design and Analysis*. Springer, 1-9, ISBN: 978-3-319-00217-0.
- Tommasi, C., Santos-Martín M.T. and Rodríguez-Díaz J.M. (2010). Discrimination between random and fixed effects logistic regression models. In: Giovagnoli, A., Atkinson, A. C., Torsney, B. (Eds): *mODa 9 - Advances in Model-Oriented Design and Analysis*, 205-212, ISBN: 978-3-7908-2409-4.
- Ferrari, P., Nicolini, G. and Tommasi, C. (2009). *Introduzione all'Inferenza Statistica*, II edition, G. Giappichelli Editore, Torino, ISBN: 9788834894286.
- Tommasi, C. (2007). Optimal designs for discriminating among several non-Normal models. In: López-Fidalgo, J., Rodríguez-Díaz, J.M., Torsney, B. (Eds): *mODa 8 - Advances in Model-Oriented Design and Analysis*. Physica-Verlag, 213-220, ISBN: 978-3-7908-1951-9.
- Diana G., Tommasi C. (2002). Estimation for finite population parameters in two phase sampling. In: Benito Vittorio Frosini, Umberto Magagnoli, G Boari, *Studi in onore di Angelo Zanella*. p. 207-221, Milano: Vita e Pensiero, ISBN: 88-343-0945-6.

Peer reviewed conference proceedings

- G. Aletti, C. May, C. Tommasi (2014). Optimal designs for linear models with functional responses. In: E.G. Bongiorno; E. Salinelli; A. Goia; P. Vieu, *Contributions in Infinite-Dimensional Statistics and Related Topics*. p. 19-24, Società Editrice Esculapio, ISBN: 9788874887637.
- Tommasi C., May C. (2010). An adaptive sequential design for model discrimination and parameter estimation in non-linear nested models. In: *Numerical analysis and applied mathematics*. p. 1917-1920, ISBN: 978-0-7354-0831-9.
- Tommasi, C. (2009). Robust optimum designs to a misspecified model. In: *Proceedings of the 6th St.Petersburg Workshop on Simulation*. St.Petersburg, St. Petersburg: VVM, 583-588, ISBN:9785965103546.
- Tommasi, C. (2007). The first order algorithm for computing standardized Bayesian KL-optimum designs. *Proceedings of the Workshop S.Co. 2007.*, PADOVA: CLEUP, 480-485, ISBN: 978-88-6129-114-0.
- López-Fidalgo, J., Tommasi, C. and Trandafir, P.C. (2005). Optimal designs for discriminating between heteroscedastic models. *Proceedings of the V St.Petersburg Workshop on Simulation*, ISBN: 9785965101023.
- Diana, G., Tommasi, C. and Preo, P. (2004). Estimation for Finite Population Mean Under Multiple-Phase Sampling. *Atti della XLII riunione scientifica della Società Italiana di Statistica*, CLEUP, 525-528, ISBN:88-7178-034-5.
- Diana, G. and Tommasi, C. (2002). Estimation for finite population mean in double sampling. *Atti della XLI riunione scientifica della Società Italiana di Statistica*, CPEUP, 599-602, ISBN: 88-7178-589-4.
- Diana, G. and Tommasi, C. (2001). Cross-validation Methods, a Comparison, *Proceedings of the Workshop S.Co. 2001*, 331-336.

Working Papers/Technical Reports

- May, C. and Tommasi, C. (2011). Model selection and parameter estimation in non-linear nested models: a sequential generalized DKL-optimum design. Preprint n. NI11066-DAE of the Isaac Newton Institute (University of Cambridge). <http://www.newton.ac.uk/preprints2011.html>
- López-Fidalgo, J., Tommasi, C. and Trandafir, P.C. (2004). T-optimality: a stopping rule for a first order algorithm. Working paper N. 30.2004, Department of Economics, Business and Statistics, University of Milano, Milano. <http://www.economia.unimi.it/pubbl/wp210.pdf>.
- Diana, G., Tommasi, C. and Preo, P. (2003). Horvitz-Thompson Estimators in Center Sampling. Working Paper, n.2003.14, Department of Statistics, University of Padova, Padova.
- Diana, G., Tommasi, C. and Zuin M. (2002). Regression and ratio estimation in two occasions. Working Paper, n.2002.14, Department of Statistics, University of Padova, Padova.
- Diana, G. and Tommasi, C. (2002). Estimation for ratio of two means in double sampling. Working Paper, n.2002.5, Department of Statistics, University of Padova, Padova.
- Diana, G., López-Fidalgo, J. and Tommasi, C. (2000). MV- and SMV-optimum designs for binary response models, Technical report, Department of Statistics, University of Padova, Padova
- Diana, G. and Tommasi, C. (1999). Stimatori della varianza a confronto, Technical report, Department of Statistics, University of Padova, Padova.

Organized Conference Sessions

- “Designing clinical trials” at the 11th Scientific Meeting of the Classification and Data Analysis (CLADAG), September, 13-15, 2017, Milan (Italy)
- “Contributions to functional data analysis-I” at the Eighth International Workshop on Simulation, September, 21-25, 2015, Vienna (Austria).
- “Optimal designs in non-standard situations” and “Recent developments in optimal design of experiments” at the 8th International Conference of the ERCIM WG on Computational and Methodological Statistics, December, 12-14, 2015, Senate House, University of London, UK.

Invited Conference contributions

- “Inference under a two-stage adaptive design for non-linear regression models with normal errors” at the 9th International Workshop on Simulation (IWS), June, 25-29, 2018, Barcellona (Spain).
- “Model Selection and Parameter Estimation in Non-linear Nested Models: a Sequential Generalized DKL-optimum Design”, at the Sixth International Workshop in Sequential Methodologies (IWSM), June, 20-23, 2017, Rouen (France).
- “Big Data and optimal design of experiments in model-based sampling survey” at the 5th Italian Conference on Survey Methodology (ITACOSM), June, 14-16, 2017, Bologna (Italy).
- “On applying Optimal Design of experiments when functional observations occur” and “PKL-optimality criterion in copula models for efficacy-toxicity response” at the Workshop MoDa11 (Model-Oriented Design and Analysis), June, 12-17, 2016, Hamminkeln (Germany).
- “Max-min optimal discriminating designs for several statistical models” at the Workshop sino-italiano (collaboration between Istituto Confucio of Padova and the University of Guangzhou), February, 2, 2016, University of Padua (Italy).
- “Robustness of P-Optimum Designs with Respect Copula Models for a Binary Toxicity-Efficacy Response” at the Eighth International Workshop on Simulation, September, 21-25, 2015, Vienna (Austria).
- “Max-min optimal discriminating designs for several statistical models” at the 7th International Conference of the ERCIM WG on Computational and Methodological Statistics (ERCIM 2014), December, 6-8, 2014, Pisa (Italy).
- “A Convergent Algorithm for Finding KL-Optimum Designs and Related Properties” at the Workshop MoDa10 (Model-Oriented Design and Analysis), June, 10-14, 2013, Lagów Lubuski (Poland).
- “Discrimination between random and fixed effects logistic regression models” at the Workshop MoDa9 (Model-Oriented Design and Analysis), June, 14-18, 2010, Bertinoro (Italy).
- “An adaptive sequential design for model discrimination and parameter estimation in non-linear nested models” at the ICNAAM 2010 (International Conference on Numerical Analysis and Applied Mathematics), September 19 - 25, 2010, Rhodes (Greece).
- “An adaptive sequential design for model discrimination and parameter estimation in non-linear nested models” at LinStat 2010, July 27 - 31, 2010, Tomar (Portugal).
- “Discriminación entre modelos de regresión logísticos con efectos fijos y aleatorios” at the Simposio Iberoamericano en Diseño de Experimentos, November, 8 - 14, 2009, Guanajuato (Mexico).
- “Robust optimum designs to a misspecified model” at the 6th St.Petersburg Workshop on simulation, June 28 - July 4, 2009, St.Petersburg (Russia).
- “Optimal designs for discriminating among several non-Normal Models” at the Workshop MoDa8 (Model-Oriented Design and Analysis), June, 4-8, 2007, Almagro (Spain).
- “Construction of MV- and SMV-Optimum Designs for Binary Response Models” at the Workshop MoDa6 (Model-Oriented Design and Analysis), June 25-29, 2001, Puchberg (Austria).

Conference Presentations

- El efecto de actividades educativo-recreativas en la salud mental de personas mayores. Jornadas de Estadística Aplicada, July 8, 1999, Department of Statistics, Salamanca (Spain).
- Stimatori intervallari della varianza a confronto. Workshop on Statistical Models, October 22 - 24, 1999, Cagliari (Italy).
- Cálculo operativo de los diseños MV- y SMV-óptimos. XXV Congreso Nacional de Estadística e Investigación Operativa, April 4-7, 2000, Vigo (Spain).
- Cross Validation Methods, a Comparison. Workshop on Statistical Inference and Decision Theory, October 27 - 29, 2000, Trieste (Italy).
- Cross-Validation methods, a comparison. Workshop S.Co. (Modelli Complessi e Metodi Computazionali Intensivi per la Stima e la Previsione) 2001, September 24 - 26, 2001, Bressanone (Italy).
- Estimation for finite population mean in double sampling. XLI riunione scientifica della Società Italiana di Statistica, June 5 - 7, 2002, Milano-Bicocca (Italy).
- The first order algorithm for computing standardized Bayesian KL-optimum designs. Workshop S.Co. 2007, September, 6-8, 2007, Venice (Italy).
- Optimal designs for linear models with functional responses. Third International Workshop on Functional and Operatorial Statistics (IWFOS 2014)}, June, 19 - 21, 2014, Stresa (Italy).

- Seminars**
 - Dpto. de Estadística. Facultad de Ciencias Universidad de Salamanca (Spain), 2004.
 - Departamento de Matemáticas, Instituto de Matemática Aplicada a la Ciencia y a la Ingeniería, Universidad de Castilla-La Mancha (Spain), 2006.
 - Department of Political Economics and Quantitative Methods, University of Pavia, 2010.
 - Departement of Statistical Science, Università Cattolica del Sacro Cuore (Milan), 2011.
- Grants**
 - From January 1, 2016 to December 31, 2020: Member of the Research Project “Diseño Óptimo de Experimentos Aplicado a la Salud y a la Investigación en Seguridad”. Ministerio de Economía y Competitividad (Madrid, Castilla-La Mancha). GRANT_NUMBER: MTM2016-80539-C2-1-R
 - From January 1, 2014 to December 31, 2016: member of the Research Project: “Diseños experimentales para modelos no lineales con aplicaciones a la ciencia y a la ingeniería”. University of Castilla-La Mancha, University of Salamanca and University of Almeria; sponsored by Ministerio de Economía y Competitividad and fondos FEDER MTM2013-47879-C2-1-P.
 - 2010: principal investigator of the one year Research Project PUR 90% (Area 14 - Scienze Economiche e Statistiche)" of the Department of Economics, Business and Statistics of the University of Milan (Italy).
 - 2010-2012 Metodi di riduzione e modelli alternativi per la valutazione dei servizi: nuove proposte e criteri di scelta (Prof. Vichi), PRIN 2008;
 - 2007-2009 Metodi per la valutazione ed il monitoraggio della soddisfazione dell'utente di servizi di pubblica utilità (Prof. Vichi), PRIN 2006;
 - 2004-2006 Modelli matematici e statistici di data mining con applicazioni all'e-government (Prof. Giudici), PRIN 2004;
 - 2001-2003 Model Building and Selection (Prof. Racugno), PRIN 2001.
- Memberships**
 - Member of the PhD committee in Statistics and Mathematical Finance, University of Milano-Bicocca [from a.y. 2013 to 2016]
 - Member of the Italian Statistical Society [from 1998 to now]
- Research visits**
 - Invited visiting professor at the Isaac Newton Institute in Cambridge (United Kingdom) [1-Nov-2011 to 10-Dec-2011].
 - Visiting professor at the Department of Statistics at the University of Castilla-La Mancha (Spain) [17-Sep-2006 to 30-Sep-2006].
 - Visiting professor at the Department of Statistics at the University of Salamanca (Spain)[1-Sep-2003 to 30 Sep-2003; 1-Sep-2004 to 30 Sep-2004].
 - Visiting student at the Department of Statistics at the University of Salamanca(Spain)[March, 1999 - June, 2000].
- Invited visiting professors**
 - Prof. Nancy Flournoy from the University of Missouri [September, 2017].
 - Prof. Lopez-Fidalgo from the University of Navarra (Spain) [March, 2016].
 - Prof. Martín-Martín R. from the University of Castilla-La Mancha [19-Jun-2010 to 29-Jun-2010].
 - From the University of Salamanca (Spain): Trandafir C.[1-Nov-2004 to 15-Jan-2005; 1-Nov-2007 to 30-Nov-2007]; Santos-Martín M.T.[16-Jan-2005 to 31-Jan-2005; 24-Nov-2008 to 29-Nov-2008; 25-May-2009 to 30-May-2009]; Rodríguez-Díaz J.M.[July 14-18, 2014].
- External collaborations**
 - External examiner for PhD theses on Optimal Design of Experiments at University of Castilla-La Mancha, Spain): Martín-Martín R. [a.y. 2005/2006]; Trandafir C., [a.y. 2005/2006]; Rodríguez-Aragon L. [a.y. 2007/2008]; Amo-Salas M. [a.y. 2008/2009].
- Teaching activities (PhD Courses)**
 - Statistical Inference, PhD in Statistics and Mathematical Finance, University of Milano-Bicocca [12 hours; a.y. 14/15 - 15/16 - 16/17].
 - Statistics, PhD Program in Business, Milan University [10 hours; a.y. 07/08 - 08/09].
 - Basic ideas of optimum design of experiments, PhD School in Statistics of the University of Padova [2 hours; a.y. 11/12].
 - Statistics, Graduate School of the University of Castilla-La Mancha, ERASMUS programme [6 hours; a.y. 06/07].
- Undergraduate or Master Courses**
 - Data analysis, University of Milan [60 hours; Master level; from a.y. 08/09 to now]
 - Statistics, University of Milan [60 hours; undergraduate degree in Economia e Management; from a.y. 15/16 to now]
 - Quantitative Methods and Statistics for the Social Sciences , University of Milan [50 hours; undergraduate degree in Management Pubblico; a.y. 14/15]
 - Statistics, University of Milan [60 hours; undergraduate degree in Economia Europea; from a.y. 02/03 to 15/16]
 - Statistics, University of Milan [40 hours; undergraduate degree in Scienze Internazionali; from a.y. 09/10 to 12/13]
 - Statistics in epidemiology, University of Milan [20 hours; undergraduate; a.y. 03/04-04/05]
 - Experimental design, University of Milano-Bicocca [40 hours; undergraduate; a.y. 03/04-04/05]

Editorial activities

- Referee for international journals: “Technometrics” (2018); “Biometrika” (2017); “Statistical papers” (2017); “Journal of Statistical Planning & Inference” (2007-2008-2010-2012-2015), “Chemosphere” (2007); “Computational Statistics & Data Analysis” (2006-2010), “Communications in Statistics Theory & Methods” (2011-2015-2017); “Information Science” (2011); “Statistical Methods & Applications” (2000-2009-2010); “The Open Statistics and Probability Journal” (2014); “International Statistical Review” (2014); “Annals of Statistics” (2015); “Statistics & Computing” (2015).
- Referee for the proceedings of the 11th International workshop in Model-Oriented Design and Analysis held in Hamminkeln-Dingen, Germany, 12-17 June 2016.
- Referee for the proceedings of the 8th International workshop in Model-Oriented Design and Analysis held in Almagro (Spain), June 4-8, 2007.

Personal information

I authorize the handling of personal information in this curriculum, according to D.Lgs n. 196/03 and following modifications and Regulations EU 679/2016 (General Regulations concerning Data Protection or GRDP) and art. 7 of University Regulations concerning protection of personal information.

I authorize, according to D.lgs 14/03/2013 n. 33 concerning transparency, in case of conferment of the position and of the fellowship, the publication of this curriculum in the web site of Università degli Studi di Milano in the section “Amministrazione trasparente”, “Consulenti e collaboratori”.

Date

Signature