

## Andrea Saltelli – short CV



Andrea Saltelli, has worked on physical chemistry, environmental sciences and applied statistics, publishing over 80 peer reviewed papers and three books. His main disciplinary focus is on sensitivity analysis of model output, a discipline where statistical tools are used to interpret the output from mathematical or computational models, and on sensitivity auditing, an extension of sensitivity analysis to the entire evidence-generating process in a policy context. A second focus is the construction of composite indicators or indices. Presently leads the Econometric and Applied Statistics Unit of the European Commission at the Joint Research Centre in Ispra (I). The Unit, with a staff of 30, develops econometric and statistic applications, mostly in support to the services of the European Commission, in fields such as lifelong learning, inequality, employment, competitiveness and innovation. He participates to the training of European Commission staff on impact assessment.

### Contacts: Andrea Saltelli,

JRC-G03, Econometrics and Applied Statistics, Institute for the Protection and Security of the Citizen (IPSC), The European Commission, Joint Research Centre, TP 361, 21027 ISPRA(VA), ITALY, Tel: +39 0 332 78 9686 Fax: +39 0 332-78 5733,  
andrea.saltelli@jrc.it  
home - <http://ipsc.jrc.ec.europa.eu/?id=155>

### Recent papers

- Giampietro, M., and Saltelli, A., 2014, Footprints to nowhere, *Ecological Indicators*, DOI: 10.1016/j.ecolind.2014.01.030, to appear.
- Saltelli, A., Funtowicz, S., When all models are wrong: More stringent quality criteria are needed for models used at the science-policy interface, *Issues in Science and Technology*, Winter 2014, 79-85.
- Saltelli, A., van der Sluijs, J., Guimarães Pereira, Â., 2013, Funtowiz, S.O., What do I make of your Latinorum? Sensitivity auditing of mathematical modelling, *International Journal Foresight and Innovation Policy*, **9** (2/3/4), 213–234.
- Paruolo, P., Saisana, A., Saltelli, A., 2013, Ratings and rankings: Voodoo or Science? *Journal Royal Statistical Society A*, **176** (3), 609–634.
- Gardi, C., Jeffery, S. Saltelli, A., 2013, An Estimate of Potential Threats Levels to Soil Biodiversity in EU, 2012, *Global Change Biology*, **19**(5), 1538–1548.

- Saltelli, A., M. Ratto, S. Tarantola and F. Campolongo, 2012 (Perennial Review of the 2005 paper), Sensitivity Analysis for Chemical Models, *Chemical Reviews*, **112** (5), pp PR1–PR21.
- Saisana, M., D’Hombres, B., and Saltelli, A., Rickety Numbers: Volatility of university rankings and policy implications, 2011, *Research Policy*, 40 165–177.
- Saltelli, A., d’Hombres, B., 2011, Might fairness be the narrative? A Policy Brief, Joint Research Centre, Report EUR 24907 EN – 2011, Luxembourg.
- Saisana, M. and Saltelli, M., 2011, Rankings and ratings: instructions for use, *Hague Journal on the Rule of Law*, **3**, 247-268.
- Saltelli, A., D’Hombres, B., Jesinghaus, J., Manca, A., Mascherini, M., Nardo, M., and Saisana, M., 2011, Indicators for European Union Policies. Business as usual?, *Social Indicators Research*, **102**(2), 197-207.
- Campolongo F, Saltelli A, Cariboni, J, 2011, From screening to quantitative sensitivity analysis. A unified approach, *Computer Physics Communication*. 182 (4), pp. 978-988.
- Saltelli, A., Annoni, P., 2010, How to avoid a perfunctory sensitivity analysis, *Environmental Modeling and Software*, **25**, 1508-1517.
- Saltelli, A., D’Hombres, B., Sensitivity analysis didn't help. A practitioner's critique of the Stern review, 2010, *Global Environmental Change*, **20**, 298-302.
- Saltelli, A., Annoni, P., Azzini, I., Campolongo, F., Ratto, M., Tarantola, S., 2010, Variance based sensitivity analysis of model output. Design and estimator for the total sensitivity index, *Computer Physics Communications*, **181**, 259–270.

## Other selected papers

- Saltelli A., 2009, Editorial, Special Issue on Sensitivity Analysis, *Reliability Engineering and System Safety*, **94**, 1133–1134.
- Saltelli, A., Ratto, M., Andres, T., Campolongo, F., Cariboni, J., Gatelli, D. Saisana, M., and Tarantola, S., *Global sensitivity analysis, The Primer*, Wiley, 2008.
- Handbook on Constructing Composite Indicators: Methodology and User Guide, OECD, 2008, ISBN: 9789264043466, by Michela Nardo, Michaela Saisana, Andrea Saltelli, Stefano Tarantola (European Commission, Joint Research Centre, Applied Statistics and Econometrics Unit), & Anders Hoffman and Enrico Giovannini (OECD, Statistics Directorate and the Directorate for Science, Technology and Industry).
- Saltelli, A., Composite indicators between analysis and advocacy, 2007, *Social Indicators Research*, **81** , 65-77.
- Saisana M., Saltelli A., Tarantola S., 2005, Uncertainty and Sensitivity analysis techniques as tools for the quality assessment of composite indicators, *Journal Royal Statistical Society A*, **168** (2), 1-17.
- Saltelli A. Tarantola S., Campolongo, F. and Ratto, M., 2004, Sensitivity Analysis in Practice. A Guide to Assessing Scientific Models, John Wiley & Sons publishers.
- Saltelli A. Tarantola S., 2002, On the relative importance of input factors in mathematical models: safety assessment for nuclear waste disposal, *Journal of American Statistical Association*, **97** (459), 702-709
- Saltelli, A., Tarantola, S. Campolongo, F., 2000, Sensitivity analysis as an ingredient of modelling, *Statistical Science*, **15**(4), 377-395.