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Title of contribution	<i>Advances in the correction of the underestimation of inequality measures in cross-section and longitudinal survey imputation</i>
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Topic	<i>Data sources and methods to complement surveys</i>
Summary: <i>The estimation of poverty and inequality measures is a primary goal for every National Statistical Office (NSO). Typically, these estimates arise from survey's data collected annually in order, not only to estimate such indicators, but also to study and analyze possible scenarios and trends from one year to another. The collection of these data requires elaborate and expensive surveys about consumption expenditure (such as Household Budget Surveys, HBS) or about income (as the EU statistics on income and living conditions, EU-SILC). Only few countries can collect data annually to facilitate the estimation of poverty and inequality. This proposal contributes to the debate on ways to improve the calculation of inequality measures in countries experiencing budget constraints, limitation of monetary variables, or incomparable survey designs over time.</i> <i>Linear regression-based survey-to-survey imputation techniques (SSITs) are most frequently discussed in this literature. These are effective at estimating predictions of poverty indicators but are much less accurate with inequality indicators: in fact, in these models, the overly stringent assumption of residuals normality distribution and the expectation that regression-based models are only able to predict distributions which are compressed around the mean and with thin tails. Unfortunately, the shape of the tails is crucial to correctly estimate inequality. Thus, almost by design, these models tend to produce estimates that are far below the correct values.</i> <i>This work proposes a method for overcoming these limitations based on a Generalized Additive Models for Location, Scale and Shape (GAMLSS); these not only release the normality assumption but also allow researcher to explain with covariates every parameter of a distribution and not only the location one. With this algorithm, we reduce the bias and obtain results that are not systematically biased.</i>	
Please select your preferred contribution (you may select both options):	
<input checked="" type="checkbox"/>	Presentation
<input type="checkbox"/>	Paper (to be submitted by 18 October)