| Progetto di ricerca/Research project | “Studi teorici e applicati in Economia” **ECOSTATDATA.1**  
“Theoretical and applied studies in Economics” **ECOSTATDATA.1** |
| Tipo/Type | Borsa Dipartimento di Eccellenza 2023-2027 / Scholarship Department of Excellence 2023-2027 |
| Borse/Scholarships | 1 |
| Abstract | ENG  
This project aims to study complex problems in economics, with rigorous and modern quantitative techniques. Research topics in microeconomics, macroeconomics, industrial organization, development economics, inequality, migration, energy and environmental economics, economics of climate change, financial economics are welcome. The use of advanced quantitative tools, such as microeconometrics, time series analysis, networks, causal inference, is requested. |
| Specific IPR rules: STANDARD |
| Progetto di ricerca/Research project | “Studi teorici e applicati in Big Data & Analytics per il Business” **ECOSTATDATA.2**  
“*Theoretical and applied studies in Big Data & Analytics for Business*” **ECOSTATDATA.2** |
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<td>Borse/Scholarships</td>
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| **Abstract**                        | **ENG**  
This project aims to study complex problems in data science, with rigorous and modern techniques. Research topics are welcome, dealing with structured and unstructured data, architecture for big data processing, machine learning, natural language understanding, social media analytics, deep learning and computer vision for business. The use of advanced quantitative tools, such as Python and R, is requested. |

**Specific IPR rules: STANDARD**
<table>
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<tr>
<th><strong>Progetto di ricerca/ Research project</strong></th>
<th>“Inferential models and computational techniques for the analysis of complex multidimensional data” <strong>ECOSTATDATA.3</strong></th>
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<td><strong>Tipo/Type</strong></td>
<td>Borsa finanziata da ente esterno / Scholarship funded by external body</td>
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<td>Università Cattolica del Sacro Cuore</td>
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<td><strong>Abstract</strong></td>
<td>ENG</td>
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<td>This project aims to develop models to make inference in complex and high-dimensional settings. Modern methods to investigate these datasets include, but are not limited to, graphical models which represent a powerful tool to incorporate sparsity. Inference will be targeted to specific aims, among which we highlight: structure learning, variable selection, and causal inference. Both frequentist and Bayesian methods are welcome along with suitable computational methods including Markov Chain Monte Carlo algorithms.</td>
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<td><strong>Specific IPR rules:</strong> STANDARD</td>
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