| Curriculum Vitae             |  |
|------------------------------|--|
| Personal information         |  |
| Surname / First name         | Benedetto Elisa  |
| Address                      | 18, via Fratelli Calandra, 10123, Torino, Italy              |
| Telephone                    | 3493549479   |
| e-mail                       | elisabnd86@gmail.com   |
| Nationality                  | Italian  |
| Date of birth                | 15 <sup>th</sup> April 1986                                  |
|                              |  |
| Education and training       |  |
| Master's Degree in           | Mathematics  |
| Vear                         | July 2010  |
|                              | Torino   |
| Vote                         | 110 cum laude  |
| Thesis in                    | Probability and statistics                                   |
|                              | The First Passage Problem for a Rivariate Diffusion Process: |
| mesis the                    | Numerical Solution with an Application to Neuroscience       |
|                              | Numerical Solution with an Application to Nearoscience.      |
| Racholor's Dograa in         | Mathematics  |
| Bachelor s Degree III        |  |
|                              |  |
| University of                |  |
|                              | Drobability and statistics                                   |
|                              | Probability and statistics                                   |
| Thesis title                 | The mathematics bening the pagerank citation ranking.        |
| Current nosition             | PhD student at the Department of Mathematics "G Poano "      |
| current position             | University of Torino, supported by a "Lagrange followship"   |
|                              | Superviser: Prof. Laura Sacardata                            |
|                              | Supervisor: Prof. Laura Sacerdole.                           |
| Scientific Activition        |  |
| Docoarch project             | "A conula approach to neural networks modelling"             |
| Research project             |  |
| Participations in conference | "YWIP 2011": First workshop for junior female researchers in |
|                              | Probability, organized in Bonn at the Institute for Applied  |
|                              | Mathematics of the Bonn International Graduate School of     |
|                              | Mathematics on May 20011. Talk.                              |
|                              | ,  |
|                              | "BIOCOMP2012: Mathematical modelling and computational       |
|                              | topics in Mathematics" on June 2012. Poster.                 |

|                      | "Tenth International Neural Coding Workshop", organized by<br>the Department of Computational Neuroscience at the<br>Academy of Sciences of the Czech Republic in Prague, on<br>September 2012. Poster.  |
|----------------------|--|
| Publications         | E. Benedetto, L. Sacerdote, C. Zucca, A first passage problem<br>for a bivariate diffusion process: Numerical solution with an<br>application to neuroscience when the process is Gauss –<br>Markov, Journal of Computational and Applied Mathematics,<br>Vol. 242, 41 – 52 (2013)   |
|                      | E. Benedetto, L. Sacerdote, On dependency properties of the ISIs generated by a two – compartmental neuronal model, To appear in Biological Cybernetics.   |
| Interests            | My Ph. D. thesis project concerns mathematical problems<br>related with models of neuronal activity. I'm working on an<br>interdisciplinary topic but my first interests are probability<br>topics. Furthermore I believe that a strong mathematical<br>background is necessary for any research in applied<br>probability.  |
| Teaching activities  | <ol> <li>Teaching assistant for the course in statistical<br/>methods, Degree in Biological Sciences (2011)</li> <li>Teaching assistant for the course in statistical<br/>processing of experimental data, Degree in Natural<br/>Sciences (2011)</li> <li>Teaching assistant for the course in probability and<br/>statistics, Degree in Mathematics (2012)</li> </ol> |
| Technical skills     | Matlab, Maple, R (free statistical software), Office, TeX  |
| Language Proficiency | English<br>- Written: Good<br>- Spoken: Good<br>- Read: Good   |