



## Europass Curriculum Vitae

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### Personal information

First name(s) / Surname(s) **Anna Tozzi**

Nationality Italian

Date of birth 21 October 1948

Gender Female

### Relevant Professional Experience

Dates and number of months 1970-1973

Employer / Commissioner CNR

Occupation or position held Research fellow

Dates and number of months 1974-83

Employer / Commissioner University of L'Aquila

Occupation or position held Assistant Professor

Description of tasks  
- Teacher of Topology  
- Teacher of General Mathematics

Dates and number of months 1984-today

Employer / Commissioner University of L'Aquila

Occupation or position held Professor in Geometry

Description of tasks  
**Teaching activities:**  
- Teacher of Topology  
- Teacher of Algebraic Topology  
- Teacher of Mathematical Logic  
- Teacher of Geometry and Linear Algebra

#### Research Activities

- 2002-2009: Organiser and responsible of the double degree (Canadian and Italian) in Mathematics and Statistics
- 1998-2000: Responsabile dell'Unità Locale PRIN "Metodi costruttivi in Topologia, Algebra ed Analisi dei Programmi"
- 2000-2002: Responsabile dell'Unità Locale PRIN "Metodi costruttivi in Topologia, Algebra ed Analisi dei Programmi"
- 2002-2004: Responsible of the local Unit of the National research project "Metodi costruttivi in Topologia, Algebra e Tecnologia dell'Informazione"
- 2004-2006: Responsabile dell'Unità Locale PRIN "Metodi costruttivi in Topologia, Algebra e Tecnologia dell'Informazione"
- 2008-2010: membro dell'Unità di Padova del PRIN "Metodi costruttivi in Topologia, Algebra e Tecnologia dell'Informazione",
- 2012-today: membro dell'Unità di Padova del PRIN "Logical Methods of Information Management"
- 1994-2010: Organiser and scientific responsible of 5 International Conferences on "Categorical Topology" (L'Aquila 1994, Lowen 1996, L'Aquila 2002, Coimbra 2008, Azzorre 2010)
- 1986-2008: Organiser of several Scientific Seminars of outstanding professors in the fields of Topology, Category Theory, Algebraic Topology.
- Author of 32 scientific papers and 5 didactic publications

Dates and number of months 1996-2003

|                                    |  |
|------------------------------------|--|
| Employer / Commissioner            | University of L'Aquila   |
| Occupation or position held        | Erasmus Responsible of the Faculty of Sciences   |
| Description of tasks               | <ul style="list-style-type: none"> <li>- responsible of the EC-Canada project: ATLANTIS "New avenues in the teaching of Mathematics" (with Trieste, Coimbra, Louvain-la-Neuve, Halifax, British Columbia-Vancouver, York Toronto)</li> <li>- responsible of the TEMPUS Phare project "Categorical Methods in Algebra and Computer Science"</li> <li>- promoter of several bilateral agreements between EU universities</li> <li>- promoter and responsible of the INTERLINK project "Double degree in Mathematics" with York University, Toronto, CA</li> </ul>  |
| Dates and number of months         | 2004-2018  |
| Employer / Commissioner            | University of L'Aquila   |
| <b>Occupation or position held</b> | Vice-rector for the International Relations and Projects   |
| Description of tasks               | <ul style="list-style-type: none"> <li>- Responsible of the internationalisation of the University</li> <li>- Promoter and organiser of double degrees</li> <li>- Promoter of international PhDs, through specific agreements and regulations</li> <li>- Responsible and organiser of hundreds Bilateral Agreements with EU and non-EU Universities</li> <li>- Organiser of in/out students and staff mobility</li> <li>- Advisor for the university staff in preparing project proposals (in all EU Programmes)</li> </ul>  |
|                                    | 2019-today   |
| <b>Position held</b>               | Rector's Consultant for the Internationalisation Policies  |
| Description of tasks               | <ul style="list-style-type: none"> <li>- Contribution to the Strategic Plan,</li> <li>- Participation to international rankings,</li> <li>- Seminars on EU policies and funding Programme</li> <li>- Preparation of proposals,</li> <li>- Support to project activities and preparation</li> </ul>   |
| Main Achievements                  | Author and responsible of TEMPUS projects:   |
| 2000-2016                          | <ul style="list-style-type: none"> <li>- 21117-2000 "Increase of student mobility in the economic field" (Russia),</li> <li>- 27083-2006 "ICT curriculum reform in Lisbon perspective" (Russia),</li> <li>- 27129-2006 "Bologna process promotion in Tajikistan through the reorganisation of International Relations Offices" (Tajikistan),</li> <li>- 00471-2008 "Professionnalisation Des Enseignements En Travail Social" (Moldavia, Russia, Kazakhstan)</li> <li>- 00148-2008 "Gouvernance Numérique des Universités Marocaines" (Moroc)</li> <li>- 00071-2008 "Awareness raising, Interest development, Desire creation and Action stimulation on the Bologna Process expansion in Central Asian countries and Russia" (CA and Russia)</li> <li>- 159143-2009 "Using local resources for microregional development sustainable agribusiness and tourism in the southern Balkans" (Albania, Macedonia, Kosovo)</li> <li>- 158627-2009 "Development of the e-learning and distance learning courses and assessment in Biomedical Sciences in the Southern Caucasus" (Georgia, Armenia, Azerbaijan)</li> <li>- 510941-2010 "English For All in Academia, to Foster Education, Research and Innovation" (Israel)</li> <li>- 511172-2010 "Curriculum Invoking Bologna-aligned Education Leading to reform in Environmental Studies" (Central Asia)</li> <li>- 516721-2011 "Licence-Master professionnels en psychologie sociale pour intervenir auprès des publics migrants en Russie, Ukraine et au Kazakhstan" (Russia, Ukraine, Kazakhstan)</li> <li>- 516885-2011 "Entrepreneuriat et Valorisation de la Recherche", (Moroc, Tunis, Algeria)</li> <li>- 530154-2012 "Student Support and Development Services" (Georgia, Azerbaijan, Kazakhstan, Kyrgyzstan, Israel)</li> <li>- 543683-2013 "English as the Cornerstone of Sustainable Technology and Research", (Israel)</li> <li>- 543713-2013 « Moderniser la formation sur les Energies Renouvelables (ER) au Maghreb: Transfert de l'expérience UE » (Moroc, Tunis, Algeria)</li> <li>- 543802-2013 "Establishment of Multidisciplinary Innovative Centres for the Development of Virtual Laboratories (MICVL) in Biology and Medicine", (Georgia, Armenia, Azerbaijan)</li> <li>- 544046-2013 Career-Oriented Curricula Development for Road Vehicle Maintenance (Palestine)</li> </ul> |

|                                    |  |
|------------------------------------|--|
|                                    | <p>Responsible of the CAPACITY BUILDING HE projects</p> <ul style="list-style-type: none"> <li>- 561640-EPP-1-2015-1-AZ-EPPKA2-CBHE-JP “Advocacy Establishment for Students through Ombudsman Position” – AESOP</li> <li>- 561966-EPP-1-2015-1-PS-EPPKA2-CBHE-JP Developing the Business and Economic research centers capacity at Palestinian Higher Institutions” – BERC (Palestine)</li> <li>- 562006-EPP-1-2015-1-ES-EPPKA2-CBHE-JP “Implementing quality of education &amp; training of the young Universities in rural area of Cambodia” – UNICAM</li> <li>- 573879-EPP-1-2016-1-FR-EPPKA2-CBHE-JP Internationalisation of master Programs In Russia and China in Electrical engineering - INSPIRE</li> <li>- 585596-EPP-1-2017-1-DE-EPPKA2-CBHE-JP Fostering Internationalisation in Agricultural Engineering in Iran and Russia - FARMER</li> </ul>  |
| Main achievements<br>2016-today    | <p>Author and coordinator of the CAPACITY BUILDING projects</p> <ul style="list-style-type: none"> <li>- 574099-EPP-1-2016-1-IT-EPPKA2-CBHE-SP” Paving the way to interregional mobility and ensuring relevance, quality and equity of access” - PAWER</li> <li>- 574049-EPP-1-2016-1-IT-EPPKA2-CBHE-JP”Modernization of the Curricula in sphere of smart building engineering - Green Building” - GREB</li> <li>- 574055-EPP-1-2016-1-IT-EPPKA2-CBHE-JP”Development of Master Programme in Renewable Energy Sources and Sustainable Environment” – RENES</li> <li>- 609764-EPP-1-2019-1-IT-EPPKA2-CBHE-SP “REgional COoperation in the field of recognition among ASIAn countries” – RecoASIA</li> <li>- 598726-EPP-1-2018-1-JO-EPPKA2-CBHE-JP”Multidisciplinary Skills for Artists’ Entrepreneurship” - MUSAE</li> <li>- 618843-EPP-1-2020-1-IT-EPPKA2-CBHE-JP “Capacity Building in Sustainability for Architectural Heritage” - SAH</li> </ul> <p>Responsible and organiser of the Erasmus Mundus Action2 projects:</p> <ul style="list-style-type: none"> <li>- TOSCA (Central Asia)</li> <li>- TOSCA II (Central Asia)</li> <li>- TARGET (Central Asia)</li> <li>- TARGET II (Central Asia)</li> <li>- GATE (South-East Asia)</li> <li>- PHOENIX (Middle East)</li> </ul> <p>Author and coordinator of the Erasmus Mundus Action 2 projects :</p> <ul style="list-style-type: none"> <li>- MAYA-NET (Central America)</li> <li>- ASSUR (Syria)</li> </ul> <p>Author and Coordinator of IPA-CBC-Adriatic project - 2°ord./0042/0</p> <ul style="list-style-type: none"> <li>- “Know-How Enhancement for Sustainable Transportation Organization - KHE-STO”.</li> </ul> <p>Author and Coordinator of ENI-CBC-MED project –</p> <ul style="list-style-type: none"> <li>- MEDiterranean Quadruple helix Approach to Digitalisation - MED-QUAD</li> </ul> <p>Author and Coordinator of Erasmus+ Strategic Partnerships</p> <ul style="list-style-type: none"> <li>- “How to win the challenge: Internationalising EQF level 5 – HINGE“</li> <li>- Building Reliable Effective and Aware Disaster emergency and prevention managing skills” – B-READI</li> </ul> <p>Coordinator of 4 projects Erasmus + KA107 with target PCs in Asia, Midle East, Russia, Africa, Balkans</p> <p>Author and Coordinator with Municipality of L’Aquila of the project DIGITAL’AQ, in the framework if the Programme DIGITAL CITIES (COSME)</p> |
| Dates and number of months         | 2002-2010  |
| Employer / Commissioner            | Region Abruzzo   |
| <b>Occupation or position held</b> | Consultant for European policies and Programmes  |

- Description of tasks
- Explanation of EU policies
  - Organisation of an Office for preparation and Management of international projects
  - Contribution to Preparation of regional policies and programmes (ROP etc.)
  - Preparation and coordination of EU and international projects (more than 30 projects financed within: INTERREG III and IV, research FPs, ESF, Culture 2000, LLP-Erasmus IP, Consortia Placement, Grundtvig, Daphne, etc.)
  - Specific cooperation between the Region and University of L'Aquila for the development of targeted actions and skills especially for the management of lifelong learning for working and non working people
  - Responsible of the ESF art.6 project FIT4WORK dealing with active ageing of over 55 workers.
  - Responsible of the INTERREG IV project ESF6CIA, developing and promoting case studies in the field of employers' age management strategies for supporting longer working lives of older workers".
  - Cooperation between the Region and University of L'Aquila in the implementation of the INTERREG IIIC project REGENERGY, dealing with renewable energies
  - Cooperation between the Region and University of L'Aquila in the implementation of the FP6 project TRANSPower, dealing with organisation of local transportation with low emissions
  - Author of a Manual for the preparation of projects within EU Programme
    - Professione Europa, edito dal Il sole 24 Ore, 2007

## Education and training

|  |                        |
|--|------------------------|
| Dates  | 1966-1970              |
| Title of qualification awarded                                 | MA degree              |
| Principal subjects/occupational skills covered                 | Mathematics            |
| Name and type of organisation providing education and training | University of L'Aquila |
| Dates  | 1970-1973              |
| Title of qualification awarded                                 | Research fellow        |
| Principal subjects/occupational skills covered                 | Mathematics            |
| Name and type of organisation providing education and training | CNR                    |

## Personal skills and competences

Mother tongue(s) **Italian**

Other language(s)

Self-assessment

*European level (\*)*

**English**

**French**

| Understanding |                 |         |                 | Speaking           |                  |                   |                 | Writing |                  |
|---------------|-----------------|---------|-----------------|--------------------|------------------|-------------------|-----------------|---------|------------------|
| Listening     |                 | Reading |                 | Spoken interaction |                  | Spoken production |                 |         |                  |
| C1            | Proficient User | C1      | Proficient User | C1                 | Proficient User  | C1                | Proficient User | C1      | Proficient User  |
| C1            | Proficient User | C1      | Proficient User | B1                 | Independent User | A2                | Basic User      | B1      | Independent User |

(\*) [Common European Framework of Reference for Languages](#)

## Other relevant skills and competences

Highly developed analytical and management skills;  
Excellent team working skills (incl. International teams);  
Excellent communication skills;  
Excellent report writing skills.

- Public policy analysis;
- evaluation (ex-ante, ex-post) of EU-funded programmes and projects;
- Socio-economic analysis;
- Cost-benefit analysis.

In the fields of:

- Education financing issues incl. cost-sharing mechanisms and regulatory instruments;
- Vocational education and training;
- Adult learning;
- Internationalization of education systems;
- Regional policy;
- Higher education: internationalization, cooperation, Bologna process application, building up of EHEA and ERA, Europe 2020 and the role of universities;
- Research and Knowledge triangle application;
- Open Innovation 2.0;
- Promotion and development of Quadruple Helix;
- Industry 4.0.

## Additional information

### Study visits for scientific reasons (the recent ones)

- University of Prague (2007, 2008, 2009, 2010)
- York University – Toronto (2007, 2008)
- Coimbra University (2009, 2010)
- Antwerpen University (2008, 2009)
- Berlin University (2010)
- Georgetown University (2011)
- Miami University (2011)

### Presentations/interventions in international scientific Conferences and Workshops (the main ones)

- International Conference in Categorical Topology – 2010, Acorres University
- International Conference in Applied Mathematical Logic -2009, Genova
- International Conference in Categorical Topology – 2014, Coimbra University

### Presentations/interventions in international Conferences and Workshops on EU Programmes and policies (the main ones)

- December 2018, Rome (IT), invited speaker on the annual Higher Education Reform Expert (HERE) conference on the theme "**Capacity building for higher education reform: The impact of collaborative international projects**"
- November 2018, Bergamo (IT), official rapporteur on Erasmus + CBHE, during the Infoday organised by the Italian National Agency
- May 2018, Bonn (DE), invited speaker on "**Sustainability and impact of Erasmus + Strategic Partnerships Cooperation projects**",
- September 2014, Baku (AZ), Student mobility and new ECTS Guide perspective
- December 2014, Kokshetav (KZ), The new Credit Mobility programme
- December 2012, Rome (IT): Good practices and outcomes of TEMPUS Programme
- December 2011, Ghent (BE): Trends for new Erasmus Mundus Programme
- December 2011, Bruxelles: Tempus coordinators' meeting, EACEA
- June 2011, Wroclaw (PL): Internationalisation of Higher Education System
- December 2010, Samarkand (UZ): Cooperation policies in the field of Higher Education,
- September 2010, Florence (IT): Development of university staff skills in preparing and managing Transnational projects, University of Florence
- June 2010, Beer Sheva (IL), Enhancing cooperation in Higher Educations System
- May 2010, L'Aquila (IT), the role of the University on the regional socio-economic development

**Publications:**

- 32 peer-reviewed papers, citation h-index 29
- 5 didactic publications

**List of Publications**

- [1] Rivestimenti e gruppoide fondamentale di uno spazio topologico, Boll:U.M.I. (4), 11 (1975), 623-637,
- [2] Isomorfismo di Hurewicz per i fibrati, Rend. di Mat. (1), 11 (1978), 115-125,
- [3] Final topological groups and coreflections, Rend. di Mat. (1), 1 (1981), 139-142,
- [4] On systems of cogenerators of epireflective subcategories, Rivista Mat. Univ. Parma (4), 9 (1983) 153-158,
- [5] Sistemi di Postnikov per i fibrati, Atti della Accademia delle Scienze di Torino, vol 116 (1982), 357-364.
- [6] On epidense subcategories of topological categories, Quaestiones Mathematicae, 6 (1983), 97-106,
- [7] On E-dense hulls and shape theory, General Topology and its Appl., Proc. Fifth Prague Topological Symposium, Prague 1981, Heldermann-Verlag, Berlin 1982, 223-238,.
- [8] On the lattice of epidense subcategories of a topological category, Lecture Notes in Mathematics 1060 (Springer-Verlag, Berlin 1984), 271-278,
- [9] On factorization structures and epidense hulls, Topology and its Applications 16 (1983), 69-80.
- [10] Dispersed factorization structures in procategories, Lecture Notes in Mathematics (Heldermann-Verlag, Berlin 1984), 567-581.
- [11] On characterization of (E,M)-structures in procategories, Rend. Circolo Mat. Palermo, 4, II(1984), 133-147.
- [12] US-spaces and closure operators, Rend. Circolo Mat. Palermo, 12, II(1984), 291-300.
- [13] On the category of supertopological spaces, Acta Univ. Carolinae, 2 (1986), 137-149, con O. Wyler.
- [14] Topological categories and closure operators, Quaestiones Mathematicae, 11 (1988), 323-337,
- [15] Completion of categories and initial completions, Cahiers de Topologie e Géom. Diff. Categ. XXX-2 (1989), 1-30,
- [16] Fibre-faithful maps and morphisms, York University Press (1992),
- [17] On  $w_\alpha$ -compactness, Discrete Mathematics 108 (1992), 13-23,
- [18] Notes on Kuratowski-Mrowka Theorems in point-free context, Cahiers de Topologie e Géom. Diff. Categ. XXXIII-1 (1992), 3-14,
- [19] Lexicographic sums and Fibre-Faithful Maps, Applied Categorical Structures 1 (1993), 59-83,
- [20] Equationally closed subframes and representation of quotient spaces, Cahiers de Topologie e Géom. Diff. Categ. XXXIV-3 (1993), 167-183,
- [21] Separation Axioms and Frame representation of some topological facts, Applied Categorical Structures 2 (1994), 107-118,.
- [22] Generalized reflective cum coreflective classes in Top and Unif, Applied Categorical Structures 4 (1996), 57-68,
- [23] Completion and coproducts of nearness frames, University of Cape Town, Math. Dept. Ed. (1999), 177-186,
- [24] Clone segments of the Tychonoff modification of a space, Applied Categorical Structures, 8 (2000), 327-337,
- [25] A generalization of Herrlich's question on almost reflective and coreflective subclasses of Top and Unif, Applied Categorical Structures, 8 (2000), 393-406,
- [26] Regular Monomorphisms of Hausdorff Frames, Applied Categorical Structures, 9 (2001), 15-33,
- [27] A note on reconstruction of spaces and maps from lattice data, Quaestiones Mathematicae, 24 (2001), 55-63,
- [28] Local directedness and some categories of domains, in corso di stampa su KAM-DIMATIA, Praga 2002.
- [29] A monad for domains and other categories, Fachbereich Seminarberichte, Hagen 2003,
- [30] Continuous DCPOs as complete information Systems, KAM-DIMATIA Series, vol.581, 2002
- [31] Categorical Foundations, Special topics in Order, Topology, Algebra and Sheaf Theory, Cambridge University Press, Edited by M.C. Pedicchio and W. Tholen, 2004
- [32] Ideals in Heyting semilattices and open homomorphisms, Applied Categorical Structures, in Quaestiones Mathematicae, vol. 30, p. 391-405, ISSN: 1607-3606, 2007

### **Didactic Publications**

- [1] Introduzione alla Teoria della Forma, 1979.
- [2] Introduction to (E,M)-categories and (E,M)-functors, 1980.
- [3] On initial completions of concrete categories, 1982.
- [4] Development of a sustainable tourism, edito dal Il sole 24 Ore, 2006
- [5] Professione Europa, edito dal Il sole 24 Ore, 2007