

## CURRICULUM VITAE OF ALDO CONCA

### Personal Data

Born November 16, 1965, Recco (Italy)  
Italian Citizen  
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### Education

“Laurea in Matematica”, University of Genova (1990)  
Advisor: Giuseppe Valla  
Thesis: “Curve autolegate”

Ph. D., University of Essen (1993)  
Advisor: Jürgen Herzog  
Thesis: Gröbner bases and determinantal rings.

### Positions Held

Post Doc, University of Essen, 1993-95  
“Ricercatore”, University of Genova, 1995-1999.  
Associated professor, University of Sassari, 1999-2000  
Full professor, University of Genova, 2000—.

### Research interests

Commutative algebra, its computational aspects and its interactions with combinatorics and algebraic geometry.

### Invitations

Conferences at the Mathematisches Forschungsinstitut **Oberwolfach** (Germany):  
May 1995: Computational Aspects of Commutative Algebra and Algebraic Geometry  
June 2000: Topics in Classical Algebraic Geometry  
July 2004: Combinatorial Commutative Algebra  
April 2005: Kommutative Algebra  
April 2009: Kommutative Algebra.  
February 2015: Geometric and Algebraic Combinatorics

Conferences at the Centre International de Rencontres Mathématiques **Luminy** (France):  
June 2000: Algèbre commutative et ses interactions avec la géométrie algébrique,  
June 2003: Algèbre commutative et ses interactions avec la géométrie algébrique,  
June 2006: Algèbre commutative et ses interactions avec la géométrie algébrique,  
October 2008: Algèbre commutative et ses interactions avec la géométrie algébrique,

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*Date:* May 17, 2015.

November 2010: *Algebre commutative et ses interactions avec la geometrie algebrique.*

July 2013: *Algebre commutative et ses interactions avec la geometrie algebrique.*

Conferences at the **Banff** International Research Station for Mathematical Innovation and Discovery (Canada):

March 2003: *Commutative Algebra and Geometry,*

October 2006: *Syzygies and Hilbert Functions,*

August 2012: *Syzygies in Algebraic Geometry, with an exploration of a connection with String Theory*

April 2016: *Free Resolutions, Representations, and Asymptotic Algebra*

Invitation to other conferences (selection)

September 2002 Sinnaia (Romania), Workshop on commutative algebra.

June 2003: Lisbona, Conference on commutative algebra

June 2004: ICTP Trieste: *Commutative Algebra*

January 2006: Hanoi, CIMPA conference on commutative algebra.

September 2007: Bari, Convegno UMI.

November 2007: Nagoya, 29th Symposium on Commutative Algebra

June 2009: Voss (Norway): Abel symposium 2009.

October 2009: Osnabrueck, Algebra and topology

July 2011: Budapest, FoCM 2011

December 2012: MSRI Berkeley: *Combinatorial Commutative Algebra and Applications*

July 2013: AIM Palo Alto, *Frame theory intersects Geometry*

September 2013, CoMeTA, Cortona (Italy)

March 2014: Annual conference of the DFG priority project SPP 1489 *Algorithmic and experimental methods in algebra, geometry, and number theory*

September 2014: Levico Terme, MOCCA, *Meeting on Combinatorial Commutative Algebra*

June 2015: Edinburgh, *Minimal free resolutions, Betti numbers, and combinatorics.*

June 2015: Porto, AMS-EMS-SPM meeting.

July 2015: Salt Lake City: *AMS Summer Research Institute on Algebraic Geometry*

July 2015: Bremen: *Workshop on Frames and Algebraic & Combinatorial Geometry.*

Series of invited lectures:

Zanjan (Iran) CIMPA School (2005)

Cortona (Italia) SIM School (2006)

Hagenberg (Austria) RISC COCOA School (2007)

Shogran (Pakistan) ASSMS-ICTP School (2008)

Chennai (India) Institute of Mathematical Sciences (2011)

Daejeon (Korea) KAIST Korean Advanced Institute of Science and Technology (2012)

Levico Terme (Italy) CIME Session on *Combinatorial Algebraic Geometry*, June, (2013)

Valladolid (Spain) EACA International School on *Computer Algebra and its Applications* June (2013)

Pragmatic (Catania) *Local cohomology and syzygies of affine algebras* (2014).

Associated Professor at MSRI (Berkeley) in the frame of the annual program “Commutative Algebra” 2002-2003 (3 months).

Associated Professor at MSRI (Berkeley) in the frame of the annual program “Commutative Algebra” 2012-2013 (4 months).

### Organization of Conferences

“Commutative algebra, homological algebra and representation theory”, Catania/Genoa/Rome (1998).

Special Session “Commutative Algebra: Hilbert Functions, Homological Methods and Combinatorial Aspects” at the First Joint International Meeting of the AMS and the UMI, Pisa, (2002).

“Hilbert functions and syzygies in commutative algebra and combinatorics”, Cortona, (2007).

“Incontro Nazionale di Algebra Moderna”, INdAM Roma (2010).

“Commutative Algebra and related topics”, Genova (2012).

“Syzygies in Algebra and Geometry” Haeundae, Busan, Korea, (2015).

“Combinatorial and Experimental Methods in Commutative Algebra and Related Fields” Osnabrück (2015).

### Publications

60 research papers on international journals such as Adv. in Math, Math.Z., Math. Ann., Composition Math, Crelle J., J. of Algebra, TAMS, PAMS, American J. of Math, Journal of Algebra & Number Theory, Journal of Pure and Applied Algebra, Communications in Algebra.

### Research grants

CNR-grant 209.01.51 (1990)

CNR-grant 203.01.58 (1991-93)

CNR-grant 203.01.62 (1994)

Young Researcher grant (Univ.Genova) (1996-1997)

Research project (Univ.Genova) (2007, 2011)

Vigoni Project 2005-2006 and 2011-2012

### PRIN (Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale)

PRIN 1997: member of the project “Geometria Algebrica, algebra commutativa, algebra computazionale e teoria dei numeri” for 24 months

PRIN 2001: member of the project “Algebra Commutativa e Computazionale” for 24 months.

PRIN 2003: member of the project “Algebra Commutativa e Computazionale” for 24 months.

PRIN 2005: member of the project “Algebra Commutativa, Combinatoria e Computazionale” for 24 months.

PRIN 2007: member of the project “Algebra Commutativa, Combinatoria e Computazionale” for 24 months.

PRIN 2010-2011: local coordinator of the project “Geometria delle Varietà Algebriche” for 36 months.

### PhD students:

Alexandru Constantinescu (2006-2009)

Le Dinh Nam (2008-2010)

Matteo Varbaro (2008-2010)

Neeraj Kumar (2010-13)

Alessio D’Ali (2014– )

### Master students:

Giulio Caviglia (2001), Bruno Benedetti (2006), Matteo Varbaro (2007), Michele Torielli (2008),

Ilaria Nunziante (2010), Luigi Ferraro (2011, Univ. of Pisa), Andrea Serafini (2011), Daniele Boccalini (2012), Martina Rovelli (2012), Emilio Esposito (2012), Giulia Bianco (2013), Alessio D'Ali (2013).

**Bachelor students:**

Matteo Varbaro (2005), Michele Torielli (2006), Roberto Ramassa (2006), Ilaria Nunziante (2007), Annalisa Perasso (2007), Mattia Garassini (2007), Giulia Bertamino (2008), Chiara Tosetti (2010), Andrea Serafini (2010), Daniele Boccalini (2010), Emilio Esposito (2010), Giulia Bianco (2011), Alessio D'Ali (2011), Gabriele Balletti (2012), Marco Caselli (2012).

**Administrative and other duties**

From 2005 to 2007 and since 2013, vice-director of the department of Mathematics of the University of Genova.

2007-2010 Dean of study of the Math curriculum of the University of Genova.

2009– Member of the panel of the PhD Program in Mathematics and Applications, University of Genova.

2012– Member of the research quality panel of the University of Genova.

Referee for several journals in mathematics including Duke Math. Journal, Adv. in Math., Math. Z., Math. Annalen, J. of Algebra.

Reviewer for funding agencies (NSF-NSA, INdAM, ANVUR,...)

Reviewer of PhD thesis (SNS Pisa, University of Rome "La Sapienza", Institute of Mathematical Sciences Chennai, Universität Zürich, Univeristy of Catania, etc..)

