

Curriculum vitae of Claudio Procesi

Born in Roma on the 31-3-1941, laurea in Matematica con lode at the Università di Roma July 1963. Ph. D. in Mathematics, University of Chicago June 1966.

1975 Professore Ordinario Univ. di Roma

Has been invited for research and teaching in several institutions:

1969-70 Visiting Ass. Prof. Columbia

1973-74 Visiting Ass. Prof. U.C.L.A.

1977-78 Visiting Prof. T.I.F.R.

1981 Visiting Prof. I.M.P.A.

1981-82 Visiting Prof. Brandeis

1984 Visiting Prof. Austin

1989 Visiting Prof. U.C.S.D.

1991 Visiting Prof. M.I.T.

1992 Visiting Prof. Grenoble

1992 Visiting Prof. M.S.R.I.

1992/5 Visiting Prof. I.A.S and San Diego.

Has been invited to several international conferences and seminars.

In 1978 has been invited to deliver a lecture in the section "Algebraic Geometry" in the International Congress in Helsinki.

In 1981 has received the Medaglia per la Matematica from the Accademia dei XL.

In 1986 has received the Feltrinelli prize in Mathematics.

Has been editor of "Communications in Algebra", "Duke Mathematical Journal", "Journal of Algebra" "Advances in Mathematics", and he is in the "Editorial Board" of: M.R.L., Rendiconti Lincei, Transformation groups.

In collaboration with E.Arbarello and E.Strickland has organized the international congress "Giornate di Geometria".

Has been in the "Panel of Algebra" for organizing the international congress in Berkley 1986, in the scientific committee of the International European congress of 1992 and chairman of the panel in Algebra for the 1994 I.C.M. meeting in Zurich. Has been member of the scientific committee of the European Community Human capital and mobility program. Has been in the directing committee of the Istituto di Alta Matematica.

Has been in the scientific council of "Abdus Salam, I.C.T.P."

In this capacity has organized a series of summer schools in Ghana, Kenya and next year in Uganda.

From 1987 is a member of the Accademia Nazionale dei Lincei.

He is a member of the International committee for the "Abel prize" (see <http://www.abelprisen.no/en/>)

The research of Claudio Procesi have been principally in:

Non commutative Algebra, Algebraic groups and Invariant theory, Enumerative Geometry, Infinite dimensional algebras and Quantum groups, Braid groups and arrangements.

The themes of the research have been:

Algebras with polynomial identities

Varieties of representations
Invariants of matrices
Tableaux and invariants in positive characteristic
Determinantal Ideals
Singularities associated to conjugacy classes
Springer Representations
Enumerative geometry of quadrics and symmetric spaces
Geometry of orbits of compact groups
Cyclic homology
Quantum groups
Discrete groups (braid group and automorphism group of a free group).
Subspace arrangements
Coxeter groups
Polytopes
Main Publications (from a total of 95 papers)

- 1 .(with E. Formanek) Mumford's conjecture for the general linear group. *Advances in Mathematics* 19 3, pp. 292-305 (1976).
- 2 .The invariant theory of $n \times n$ matrices. *Advances in Mathematics* 19 (1976).
- 3 .(with C. De Concini) A characteristic free approach to invariant theory. *Advances in Mathematics* 21 (1976).
- 4 .(with C. De Concini) Complete Symmetric Varieties. C.I.M.E. 1982, Springer Lecture Notes 997, pp. 1-44 (1983).
5. (with C. De Concini) Complete Symmetric Varieties II (Intersection Theory). *Advanced Studies in Pure Mathematics* 6, Algebraic groups and related topics pp. 481-513 (1985).
- 6 .(with G. Schwarz) Inequalities defining orbit spaces. *Inv. Mathematics* v. 81, 3,pp. 539-554 (1985).
- 7 .A formal inverse to the Cayley Hamilton theorem. *Journal of Algebra* 107 1, pp. 63-74 (1987).
- 8 .(with E. Formanek) The Automorphism Group of a Free Group is not linear. *Journal of Algebra* v.149,n.2 pp.494-499 (1992).
- 9 .(with De Concini) Wonderful models of subspace arrangements, *Selecta Mathematica*, New Series Vol. 1, No. 3 (1995) 459-494.
10. C. DeConcini, C. Procesi, Toric arrangements. [math.AG/0505351](https://arxiv.org/abs/math/0505351)