

# Curriculum Vitae

## PERSONAL INFORMATION

**Birth:** July 11th 1968, Foggia (Italy).

**Citizenship:** Italian.

**Actual Position:** Associate Professor in Algebra, Università degli Studi Roma Tre.

**E-mail:** tfrance@mat.uniroma3.it

**Office Telephone:** +39 06 57338015

**Affiliations:** UMI - GNSAGA

**Languages:** English - French

## EDUCATION

1. 1992 - **Laurea in Matematica** - Università degli Studi di Roma “La Sapienza”.
2. 1997- **Ph.D. in Mathematics**, Università degli Studi di Roma “La Sapienza”.

## GRANTS

1. 1992/93 Post-lauream grant - INDAM (Istituto nazionale di Alta Matematica, CNR);
2. 1993/97 Four year Ph.D. grant - Università di Roma La Sapienza
3. 1997/98 Post-Doc fellowship - Laboratoire de Mathématiques de la Faculté des Sciences de Saint Jérôme, Université d’Aix-Marseille III, Marseille.
4. 1999/2000 Assegno di ricerca (tenure track) - Università degli Studi di Trieste.
5. 20001/2002 Assegno di ricerca (tenure track) - Università degli Studi Roma Tre.

## VISITING POSITIONS

1. january/june 1995 - Université d’Aix-Marseille III, Marseille - France.
2. january/june 1996 - Florida State University, Tallahassee, Florida - USA.
3. 1997/ 1998 - Université d’Aix-Marseille III, Marseille - France.
4. august 20th/september 15th 1998 - Ohio State University, Columbus, Ohio USA.
5. march 25th/april 1st 2002 - University of North Carolina, Charlotte, North Carolina - USA.
6. april 1/14th 2002 - Ohio State University, Columbus, Ohio USA.
7. june 7/15th 2003 - Erasmus TS (Teaching Staff) - Université d’Aix-Marseille III, Marseille - France.
8. 19/25 april 2008 - Erasmus TS (Teaching Staff) - Université d’Aix-Marseille III, Marseille - France.

## SCIENTIFIC INTERESTS

Commutative Algebra. Dedekind, Prüfer and Krull domains: multiplicative ideal theory topics. Divisorial ideals and star operations. Integer-valued polynomial rings. Topological aspect of the valuation overrings of  $\mathbb{Z}[X]$ . Birational extensions of regular local rings.

## MAIN CONFERENCES

1. june 17/19 1997 - *Krull dimension of Integer-Valued Polynomial Rings on a subset* - Rencontre Internationale d'Algèbre Commutative sur les Polynomes à Valeurs Entières, Université d'Aix-Marseille III, Marseille - France;
2. November 8/9 1997 - *Multiplicative properties of rings of integer-valued polynomials* - Special Session on Commutative algebra, 928<sup>th</sup> meeting of the American Mathematical Society, Albuquerque, New Mexico USA;
3. may 29/june 2nd 2000 - *Divisorial and t-ideals in the ring of integer-valued polynomials over a valuation domain*- 2a Rencontre Internationale sur les Polynomes à Valeurs Entières, Société Mathématiques de France CIRM (Centre International de Rencontres Mathématiques), Marseille - France,
4. june 7/12 2001 - *Polynomial closure in pseudo-valuation domains* - Fourth International Conference on Commutative Ring Theory and Applications, University of Féz - Morocco,
5. june 3/8 2002 - *Strong Mori properties of Integer-Valued Polynomial Rings* - Algebra Conference, Venezia 2002, Venezia, Italy;
6. june 12/16 2002 - *Strong Mori properties of Integer-Valued Polynomial Rings II* - First Joint Meeting AMS-UMI, Pisa, Italy;
7. september 8/13 2003 - *Prüfer overrings of  $\mathbb{Z}[X]$*  - XVII Congresso UMI, Milano, Italy
8. may 31/june 5 2004 - *Polynomial Closure in Prüfer and Essential domains* - Cortona 2004 - Commutative Rings and their Modules, Cortona, Italy;
9. june 4 /10 2006 - *Domains in which the operation w is the identity and some relations with Prüfer domains* - Workshop on Commutative Rings, Cortona, Italy;
10. september 17 /20 2007 - *GCD-Bezout Domains* - Workshop on Commutative Rings and their Modules, Bressanone- Brixen, Italy.
11. june 23/28 2008 *Integrally closed overrings of  $\mathbb{Z}[X]$*  - Fifth international Fez conference on commutative algebra and applications, Fez, Marocco.
12. march 18/21 2010 - *On star-invertibility of ideals* - The First International Conference on Mathematics and Statistics, AUS-ICMS'10, Sharjah, UAE.
13. december 19/22 2012 *An ultrafilter characterization of PvMD* - Conference on commutative rings, integer-valued polynomials and polynomial functions in Graz, Graz, Austria.

## ORGANIZING AND SCIENTIFIC SERVICE

- Organizing member of the Commutative Algebra Seminar at the Department of Mathematics, Università degli Studi Roma Tre, Roma, Italy;
- member of the Organizing Committee of the Conference Cortona 2004 - Commutative Rings and their Modules, Cortona, Italy - May 31st /June 5 2004;
- member of the Organizing Committee of the Workshop on Commutative Rings, Cortona, Italy - June 4/10 2006;

- member of the Scientific and Organizing Committee of the Conference Commutative Ring Theory Days 2010 - 2010, Roma - May 20/21 2010;
- organizer of the Algebra session of the XIX UMI (Unione Matematica Italiana) Conference, Bologna - September 12/17 2011;
- referee for various international journals like Communications in Algebra, Journal of Commutative Algebra, Journal of the London Mathematical Society;
- main organizer and member of the Scientific Committee of the Conference Commutative Rings and their Modules, 2012, Bressanone - June 4-8 2012.

## PAPERS AND PREPRINTS Thesis

1. Integer-valued polynoimal rings and Prüfer domains - tesi di laurea (BS memoire, 1992).
2. Dimesion theory and multiplicative ideal aspect in the integer-valued polynomial ring (PH.D. thesis, 1997.)

## Papers published on international journals

1. M. Fontana - L. Izelgue - S. Kabbaj - F.T., *On the Krull dimension of domains of Integer-Valued Polynomials*, Expositiones Math. **15** (1997), 433 - 465.
2. F.T., *Integer-valued polynomials over Krull-type domains and Prüfer v-multiplication domains*, Proc. Amer. Math. Soc. **128** (2000), 1617 - 1625.
3. S. Gabelli - F.T., *On the class group of integer-valued polynomial rings over Krull domains*, J. Pure Appl. Algebra **149** (2000), 47 - 67.
4. F.T., *Divisorial prime ideals of Int(D) when D is a Krull-type domain*, Comm. Algebra **28**, n. **10** (2000), 4647 - 4663.
5. P.-J. Cahen - A. Loper - F.T. *Integer-valued polynomials and Prüfer v-multiplication domains*, J. Algebra **226** (2000), 765 - 787.
6. P.-J. Cahen - J.L. Chabert - D. Dobbs - F.T., *On locally divided domains of the form Int(D)*, Archiv der Mathematik **74** (2000), 181 - 193.
7. F.T., *Polynomial closure in Noetherian pseudo-valuation domains*, Comm. Algebra **31**, n. **11** (2003), 5431 - 5446.
8. M.H. Park - F.T., *Strong Mori and Noetherian properties of integer-valued polynomial rings*, J. Pure Appl. Algebra **186**, n. **3** (2004), 297 - 309.
9. M.H. Park - F.T., *Polynomial closure in Essential domains*, Manuscripta Math. **117** n. **1** (2005), 29–41.
10. G. Picozza - F.T., *Domains in which semistar tilde operations on ideals are the identity*, Comm. Algebra **36** n. **5** (2008), 1954-1975.
11. A. Loper - F.T., *A classification of the integrally closed rings between  $\mathbb{Z}[X]$  and  $\mathbb{Q}[X]$* , J. Commutative Algebra **1(1)** (2009), 91 - 157.
12. G. Picozza - F.T., *Flat ideals and stability in integral domains*, J. Algebra **324** n. **8** (2010), 1790-1802.
13. C.A. Finocchiaro - G. Picozza - F.T., *Star invertibility and t-finite character in integral domains*, J. Algebra Appl. **10** (2011), no. 4, 755-769.

14. M.H. Park - F.T., *Divisibility properties related to star-operations on integral domains*, Int. Electron. J. Algebra 12 (2012), 53-74.
15. B.Olberding - F.T., *Integrally closed rings in birational extensions of two-dimensional regular local rings*, accepted for publication on Math. Proc. Camb. Phil. Soc.

#### **Papers published on books and conference proceedings**

1. F.T., *On the Krull dimension of  $\text{Int}(D)$  when  $D$  is a pullback*, Commutative Ring Theory II, Lecture Notes Pure Appl. Math., Marcel Dekker **185** (1997), 457-476.
2. F.T., *Integer-valued polynomial rings*, Proceedings of the Young Algebra Seminar 1999-2000, Università degli Studi "Tor Vergata".
3. M. Fontana - L. Izelgue - S. Kabbaj - F.T., *Polynomial closure in essential domains and pullbacks*, Advances in Commutative Ring theory, Lecture Notes Pure Appl. Math., Marcel Dekker **205** (2000), 307 - 321.
4. P.J. Cahen - E. Houston - F.T., *The  $t$ - and  $v$ - spectra of the ring of integer-valued polynomials over a valuation domain*, Ideal theoretic methods in commutative algebra, Lecture Notes in Pure and Appl. Math., Marcel Dekker **220** (2001), 109 - 117.
5. S. Gabelli - F.T., *Complete integral closure and the Noetherian property for the integer-valued polynomial rings*, Commutative Ring Theory and Applications, Lecture Notes Pure Appl. Math., Marcel Dekker **231** (2003), 173-189.

#### **Works in progress**

1. M.H. Park - F.T., *A characterization of Bhargava rings which are PvMD*, preprint
2. C.A. Finocchiaro - F.T., *On a characterization of PvMD using ultrafilters and some applications*, preprint.