



## Claudio Carmeli

Assistant Professor MAT/07

DIME

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0103536008 (GENOVA)

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**Teaching and research fields**  
Mathematical Physics

### Office hours

Send me an email and we'll make an appointment...

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### Curriculum

**2013** : Natitional Scientific Qualification in "Mathematical Physics" and in "Analysis and Probability"  
**15/12/2011** : Assistant Professor MAT/07 at DIME (University of Genova)

**2008-2006** : Postdoctoral fellow University of Genova

**2003-2006** : PhD (Department of Physics, University of Genova)

**Thesis**: "Super Lie groups: Structure and Representations"

**Supervisor**: prof. G. Cassinelli (Department of Physics, University of Genova)

**Rapporteur**: prof. V.S. Varadarajan (Department of Mathematics UCLA, Los Angeles)

**1997-2002** : Master degree in Physics (110/110 cum laude)

Department of Physics, University of Genova

**Thesis**: "Meccanica dei sistemi anolonomi: un approccio costitutivo"

**Supervisor**: prof. E. Massa (Department of Mathematics, University of Genova)

**1992-1997** : Diploma di Scuola Superiore: Liceo Classico G.Mazzini (Genova) (Voto: 60/60)

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### Most significant publications

#### Books

Carmeli C, Caston L, Fioresi R

**Mathematical Foundations of Supersymmetry**

EMS Ser. Lect. Math., European Math. Soc., Zurich 2011

#### Peer reviewed papers

1. Carmeli C, Heinosaari T, Schultz J, Toigo A  
**Expanding the principle of local distinguishability**  
"Physical Review A - Atomic, Molecular, and Optical Physics" 91 042121 (2015)
2. Carmeli C, Heinosaari T, Schultz J, Toigo A  
**Nonuniqueness of phase retrieval for three fractional Fourier transforms**  
accepted for publication on "Applied and Computational Harmonic Analysis" (2014)



UNIVERSITÀ DEGLI STUDI DI GENOVA  
SCUOLA POLITECNICA  
MSc in Energy Engineering

3. Carmeli C, Heinosaari T, Schultz J, Toigo A  
**Tasks and premises in quantum state determination**  
J. Phys. A: Math. Theor. 47 (2014) 075302. (2014)
  4. Balduzzi L., Carmeli C., Fioresi R.  
**A comparison of the functors of points of supermanifolds**  
"Journal of Algebra and its Applications" (2012)
  5. Carmeli C, Fioresi R  
**Super distributions, Analytic and Algebraic super Harish-Chandra pairs**  
"Pacific Journal of Mathematics",(2012)
  6. Carmeli C., Heinosaari T., Toigo A.  
**Informationally complete joint measurements on finite quantum systems**  
Physical Review A (2012) 012109
  7. Carmeli C., Heinosaari T., Toigo A.  
**Sequential Measurements of Conjugate Observables**  
J. Phys. A: Math. Theor. 44 (2011) no. 28 285304, 24 pp
  8. Balduzzi L, Carmeli C, Cassinelli G.,  
**Representations of super Lie groups: some remarks** "Springer Lecture Notes in Mathematics" 2011  
"Supersymmetry in Mathematics and Physics" Eds. S. Ferrara, R. Fioresi, V.S.Varadarajan
  9. Balduzzi L., Carmeli C.,Cassinelli G.  
**Super Vector Bundles**  
J. Phys.: Conf. Ser. 284 012010
  10. Carmeli C., De Vito E., Toigo A., Umanita' V.,  
**Vector Valued Reproducing Kernel Hilbert Spaces and Universality**  
Analysis and Applications 8 (2010), no.1, pp 19-61
  11. L. Balduzzi, C.Carmeli, R. Fioresi,  
**The local functor of points of supermanifolds**  
Expositiones Mathematicae 28 (2010) pp.201-217
  12. C. Carmeli, T. Heinonen, A. Toigo  
**Covariant quantum instruments**  
Journal of Functional Analysis 257 (2009) pp 3353-3374
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