Sylvain Carpentier

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Department of Mathematics, Columbia University
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Research Interests
Mathematical physics, integrable systems of PDEs and differential-difference equations, Noncommutative algebra.

Employment
Simons Postdoctoral Research Scientist at **Columbia University** 07/2017-06/2021

Education
-Graduate student at the **Massachusetts Institute of Technology**, Cambridge MA, ... 2013-2017
supervised by Victor Kac
-Master of mathematics at **Universite Paris Orsay** 2011-2012
-Student of the **Ecole Normale Superieure de Paris** 2009-2013

Diplomas and Awards
- PhD in Mathematics, Massachusetts Institute of Technology 06/2017
- Johnson Prize for best graduate mathematical paper of the year at MIT 05/2017
A sufficient condition for a Rational Differential Operator to generate an Integrable System

Selected Talks
-Geometric and automorphic aspects of W algebras, Lille 3 .... 05/2019
-Univeristy of Glasgow, integrable system seminar 04/2019
-Univeristy of Kent, Canterbury, ... 04/2019
- DART IX, University of Leeds 08/2018
- Seminar of Mathematical physics, University of Columbia .... 04 and 11/2018
- Kolchin seminar, City University of New York Graduate Center 09/2017
- Univeristy of Kent, Canterbury 07/2017
- MIT Infinite dimensional algebra seminar, PhD defense 04/2017
- SISSA, Trieste 07/2016

Conferences and research visits
- *DART IX* at Univeristy of Leeds 08/2018
- *Representation Theory, Mathematical Physics and Integrable Systems* at CIRM, ... 06/2018
Luminy, France
- University of kent, UK, visiting J.P. Wang and A. Mikhailov 07/2017
- *Geometry and Representation Theory*, Schrodinger Institute, Vienna 01/2017
-SISSA, Trieste, visiting V. Kac and B. Dubrovin 07/2016
- *Perspectives in Lie Theory*, Centro de Giorgi, Pisa 01/2015
-Universita di la Sapienza, Rome, visiting Alberto De Sole 05-07/2014
-IHES, Bures sur Yvette, France 2012/2013
-*Algebraic Structures in Integrable Systems* at Moscow State University, ... 12/2012

Teaching
-Calculus II at Columbia University, ... Fall 2018
-Teaching assistant for linear algebra at MIT, ... 2016/2017

- Undergraduate Research mentor at MIT,   Summer 2015
-Teaching assistant for mathematiques I at Paris 7   Fall 2013

Language
French (native), English (fluent), Spanish (proficient)