

1. Record Nr.	UNINA9910481019403321
Autore	Lambrechts Pascal <1964->
Titolo	Formality of the little N-disks operad // Pascal Lambrechts, Ismar Volic
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , 2013 ©2013
ISBN	1-4704-1669-7
Descrizione fisica	1 online resource (130 p.)
Collana	Memoirs of the American Mathematical Society, , 1947-6221 ; ; Volume 230, Number 1079
Disciplina	514/.24
Soggetti	Homotopy theory Operads Loop spaces Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Volume 230, Number 1079 (first of 5 numbers)."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Contents""; ""Acknowledgments""; ""Chapter 1. Introduction""; ""1. Plan of the paper""; ""Chapter 2. Notation, linear orders, weak partitions, and operads""; ""2.1. Notation""; ""2.2. Linear orders""; ""2.3. Weak ordered partitions""; ""2.4. Operads and cooperads""; ""Chapter 3. CDGA models for operads""; ""Chapter 4. Real homotopy theory of semi-algebraic sets""; ""Chapter 5. The Fulton-MacPherson operad""; ""5.1. Compactification of configuration spaces in $a^{a^?}$ ""; ""5.2. The operad structure""; ""5.3. The canonical projections"" ""5.4. Decomposition of the boundary of [ ] into codimension 0 faces"" ""5.5. Spaces of singular configurations""; ""5.6. Pullback of a canonical projection along an operad structure map""; ""5.7. Decomposition of the fiberwise boundary along a canonical projection""; ""5.8. Orientation of [ ]""; ""5.9. Proof of the local triviality of the canonical projections""; ""Chapter 6. The CDGAs of admissible diagrams""; ""6.1. Diagrams""; ""6.2. The module ( ) of diagrams""; ""6.3. Product of diagrams""; ""6.4. A differential on the space of diagrams"" ""6.5. The CDGA ( ) of admissible diagrams"" ""Chapter 7. Cooperad structure on the spaces of (admissible) diagrams""; ""7.1. Construction

of the cooperad structure maps  $I?_{\{ \}} \}$  and  $I?_{\{ \}} \}$ "; ""7.2.  $I?_{\{ \}} \}$  and  $I?_{\{ \}} \}$  are morphisms of algebras""; ""7.3.  $I?_{\{ \}} \}$  is a chain map""; ""7.4. Proof that the cooperad structure is well-defined""; ""Chapter 8. Equivalence of the cooperads  $\mathcal{A}^{coop}$  and  $\mathcal{A}^{*}([a^{??}])$ ""; ""Chapter 9. The Kontsevich configuration space integrals""; ""9.1. Construction of the Kontsevich configuration space integral ""; ""9.2.  $\mathcal{A}^{*}([a^{??}])$  is a morphism of algebras"" ""9.3. Vanishing of  $\mathcal{A}^{*}([a^{??}])$  on non-admissible diagrams"" ""9.4.  $\mathcal{A}^{*}([a^{??}])$  and  $\mathcal{A}^{coop}$  are chain maps""; ""9.5.  $\mathcal{A}^{*}([a^{??}])$  and  $\mathcal{A}^{coop}$  are almost morphisms of cooperads""; ""Chapter 10. Proofs of the formality theorems""; ""Index of notation""; ""Bibliography""

---