

| | |
|-------------------------|--|
| 1. Record Nr. | UNISA996466492403316 |
| Autore | Etheridge Alison |
| Titolo | Some Mathematical Models from Population Genetics [[electronic resource]] : École d'Été de Probabilités de Saint-Flour XXXIX-2009 // by Alison Etheridge |
| Pubbl/distr/stampa | Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2011 |
| ISBN | 3-642-16632-6 |
| Edizione | [1st ed. 2011.] |
| Descrizione fisica | 1 online resource (VIII, 119 p. 15 illus.) |
| Collana | École d'Été de Probabilités de Saint-Flour, , 0721-5363 ; ; 2012 |
| Disciplina | 576.58015118 |
| Soggetti | Biomathematics Mathematical models Partial differential equations Statistics Genetics and Population Dynamics Mathematical and Computational Biology Mathematical Modeling and Industrial Mathematics Partial Differential Equations Statistics for Life Sciences, Medicine, Health Sciences |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Bibliographic Level Mode of Issuance: Monograph |
| Nota di bibliografia | Includes bibliographical references and index. |
| Sommario/riassunto | This work reflects sixteen hours of lectures delivered by the author at the 2009 St Flour summer school in probability. It provides a rapid introduction to a range of mathematical models that have their origins in theoretical population genetics. The models fall into two classes: forwards in time models for the evolution of frequencies of different genetic types in a population; and backwards in time (coalescent) models that trace out the genealogical relationships between individuals in a sample from the population. Some, like the classical Wright-Fisher model, date right back to the origins of the subject. Others, like the multiple merger coalescents or the spatial Lambda-Fleming-Viot process are much more recent. All share a rich |

mathematical structure. Biological terms are explained, the models are carefully motivated and tools for their study are presented systematically.
