

**Sagan, Bruce E.**

**The symmetric group. Representations, combinatorial algorithms, and symmetric functions.**  
**2nd ed.** (English) [Zbl 0964.05070](#)

*Graduate Texts in Mathematics*. 203. New York, NY: Springer. xv, 238 p. (2001).

A classic gets even better. See [Zbl 0823.05061](#) for review of first edition. This edition has new material including the Novelli-Pak-Stoyanovskii bijective proof of the hook formula, Stanley's proof of the sum of squares formula using differential posets, Fomin's bijective proof of the sum of squares formula, groups acting on posets and their use in proving unimodality, and chromatic symmetric functions.

Reviewer: [David M. Bressoud \(Saint Paul\)](#)

**MSC:**

- [05E10](#) Combinatorial aspects of representation theory
- [05E05](#) Symmetric functions and generalizations
- [05-02](#) Research exposition (monographs, survey articles) pertaining to combinatorics
- [20C20](#) Modular representations and characters

Cited in **1** Review  
Cited in **320** Documents

**Keywords:**

[algebraic combinatorics](#); [representation theory](#); [symmetric group](#)