

## 9.S: Summary

---

### References

- M. Kardar, *Statistical Physics of Fields* (Cambridge, 2007) A superb modern text, with many insightful presentations of key concepts.
- M. Plischke and B. Bergersen, *Equilibrium Statistical Physics* (3<sup>rd</sup> edition, World Scientific, 2006) An excellent graduate level text. Less insightful than Kardar but still a good modern treatment of the subject. Good discussion of mean field theory.
- G. Parisi, *Statistical Field Theory* (Addison-Wesley, 1988) An advanced text focusing on field theoretic approaches, covering mean field and Landau-Ginzburg theories before moving on to renormalization group and beyond.
- J. P. Sethna, *Entropy, Order Parameters, and Complexity* (Oxford, 2006) An excellent introductory text with a very modern set of topics and exercises.

### Endnotes

1. A more mathematically rigorous name would be the *renormalization monoid*.↩
2. Our choice of what terms to put in the exponent in the second line below is dictated by global  $\mathbb{Z}_2$  symmetry. Once we sum over  $\sigma_0$ , the result should be invariant under simultaneous reversal of  $\sigma_{1-4}$ .↩

---

This page titled [9.S: Summary](#) is shared under a [CC BY-NC-SA](#) license and was authored, remixed, and/or curated by [Daniel Arovas](#).