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Autore	Wu Jie-qiang
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Nota di contenuto	Background -- Holographic Entanglement Entropy in a Finite System at Finite Temperature -- One Loop Partition Function -- Holographic Entanglement Entropy in a General System -- Conformal Block and the Holographic Description -- Conclusion and Outlook.
Sommario/riassunto	This book focuses on AdS3/CFT2, addressing different aspects of this correspondence in field theory and in gravity, including entanglement entropy, higher genus partition function, and conformal block. Holographic entanglement entropy is an important area in holographic and quantum information, which implies a deep relation between geometry and quantum entanglement. In this book, the authors use holographic entanglement entropy as a tool to investigate AdS3/CFT2. They study the entanglement entropy at high temperature in field theory and in holographics, and show that the results match each other in classical and one-loop order. In the AdS3/CFT2 system, they examine in detail the correspondence, exploring the higher genus partition function, entanglement entropy in a general system and conformal block, and they find good correspondence in field theory and gravity. The result strongly supports AdS3/CFT2 correspondence. In

addition, they develop several important techniques in 2d CFT and 3d gravity, which also offer inspiration for other fields.