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| Autore | Malik Shantanu |
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| ISBN | 981-15-9720-0 |
| Edizione | [1st ed. 2021.] |
| Descrizione fisica | 1 online resource (XXI, 114 p. 74 illus., 72 illus. in color.) |
| Disciplina | 530 |
| Soggetti | Physics<br>Golf<br>Sports sciences |
| Lingua di pubblicazione | Inglese |
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| Nota di contenuto | Chapter 1: Introduction -- Chapter 2: Understanding the motion - physical models -- Chapter 3: Solving the equations of motion -- Chapter 4: How does wind impact gameplay? -- Chapter 5: Gameplay, the course and wind -- Chapter 6: Concluding thoughts. |
| Sommario/riassunto | This book simulates the complete trajectories (flight and subsequent ground run) of golf shots using the aerodynamic and material properties of golf balls, and establish the significance of wind’s impact on gameplay. It also presents insight into how physical parameters like launch conditions (speed, angle and spin-rate) and wind conditions affect the trajectory of a golf ball. It discusses the specific effects of wind on the flight trajectory and explore the consequences of effect of wind direction; impact of golf club selection on the wind-induced deviation; strategies and their effectiveness to counter the diversion due to wind; and the sensitivity of the trajectory to aerodynamic characteristics of golf balls. Furthermore, the impact of wind on a player's strategy is elucidated with cases studies on the renowned holes of three golf courses: (i) Hole 17, TPC Sawgrass, (ii) Hole 8, Muirfield Golf Club, and (iii) Hole 18, Pebble beach Golf links. It presents an integrated mathematical model and quantitative data on ball trajectory accompanied by insights and illustrations for players, golf-course |

designers, ball manufacturers, scientific community, and golf enthusiasts. This book will be useful for researchers and professionals in the fields of aerodynamics engineering, sports science and physics. Additionally, this book will be a good read for golf players and coaches, golf-course designers, as well as golf-ball manufacturers. .