

1. Record Nr.	UNINA9910812751603321
Autore	Glockner Helge <1969->
Titolo	Positive definite functions on infinite-dimensional convex cones / / Helge Glockner
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , 2003
ISBN	1-4704-0387-0
Descrizione fisica	1 online resource (150 p.)
Collana	Memoirs of the American Mathematical Society, , 0065-9266 ; ; number 789
Disciplina	510 s 515/.2433
Soggetti	Harmonic analysis Convex bodies Representations of groups Laplace transformation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Volume 166, number 789 (second of 3 numbers)."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Contents""; ""Introduction""; ""Part I. Preliminaries and Preparatory Results""; ""1 Bounded and unbounded operators""; ""2 Cone-valued measures""; ""3 Measures on topological spaces""; ""4 Projective limits of cone-valued measures""; ""5 Holomorphic functions""; ""6 Involutive semigroups and their representations""; ""7 Positive definite kernels and functions""; ""8 C*-algebras associated with involutive semigroups""; ""9 Integral representations of positive definite functions""; ""10 Convex cones and their faces""; ""11 Examples of convex cones"" ""12 Conelike semigroups: definition and examples""""13 Representations of conelike semigroups I""; ""14 Fourier and Laplace transforms""; ""15 Generalized Bochner and Stone Theorems""; ""Part II. Main Results""; ""16 Nussbaum Theorem for open convex cones""; ""17 Positive definite functions on convex cones with non-empty interior""; ""18 Positive definite functions on convex sets""; ""19 Associated Hilbert spaces and representations""; ""20 Nussbaum Theorem for generating convex cones""; ""21 Representations of conelike semigroups II""; ""22 Associated unitary representations""

2. Record Nr.	UNINA9910828734403321
Autore	Adamy David
Titolo	EW 105 : space electronic warfare / / David L. Adamy
Pubbl/distr/stampa	Norwood, Massachusetts : , : Artech House, , [2021] ©2021
ISBN	1-5231-4579-X 1-63081-835-6
Descrizione fisica	1 online resource (247 pages)
Collana	Artech House electronic warfare library
Disciplina	623.043
Soggetti	Electronics in military engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	; Machine generated contents note: ; 1. Introduction -- ; 1.1. Orbital Relationships -- ; 1.2. Book Flow -- ; 1.3. History of Signal Intelligence Satellite Programs -- ; 1.4. A Note about Orbital Calculations in This Book -- ; 2. Spherical Trigonometry -- ; 2.1. Plane Trigonometry -- ; 2.1.1. The Law of Sines -- ; 2.1.2. The Law of Cosines for Sides -- ; 2.1.3. The Law of Cosines for Angles -- ; 2.1.4. Right Plane Triangle -- ; 2.2. The Spherical Triangle -- ; 2.3. Trigonometric Relationships in Any Spherical Triangle -- ; 2.3.1. Law of Sines for Spherical Triangles -- ; 2.3.2. Law or Cosines tor Sides -- ; 2.3.3. Law of Cosines for Angles -- ; 2.3.4. The Right Spherical Triangle -- ; 2.3.5. Napier's Rules -- ; 2.4. Examples of Plane and Spherical Triangles Used in Problems -- ; 3. Orbit Mechanics -- ; 3.1. Elements of an Elliptical Orbit -- ; 3.2. Relationship Between the Size of an Orbit and Its Period -- ; 3.3. SVP -- ; 3.4. An Earth Surface Location -- ; 3.5. The Propagation Distance -- ; 3.6. Earth Traces -- ; 3.6.1. Satellite Earth Trace -- ; 3.6.2. Polar Orbit Earth Traces -- ; 3.6.3. Synchronous Satellite Earth Traces -- ; 3.7. Location of an EW Threat -- ; 3.7.1. Calculating the Look Angles -- ; 3.7.2. Calculating the Azimuth to the Threat -- ; 3.7.3. Calculating Range and Elevation to the Threat Location -- ; 3.8. Calculating the

Distance to the Horizon -- ; 3.8.1. Horizon Distances for Circular Orbits -- ; 4. Radio Propagation -- ; 4.1. Introduction -- ; 4.2. One-Way Link -- ; 4.3. Propagation Loss Models -- ; 4.3.1. LOS Propagation -- ; 4.3.2. Two-Ray Propagation -- ; 4.3.3. Minimum Antenna Height for Two-Ray Propagation -- ; 4.3.4. A Note about Very Low Antennas -- ; 4.3.5. Fresnel Zone -- ; 4.3.6. Complex Reflection Environment -- ; 4.3.7. KED -- ; 4.3.8. Atmospheric Loss -- ; 4.3.9. Rain and Fog Attenuation -- ; 5. Radio Propagation In Space -- ; 5.1. LOS Loss -- ; 5.1.1. Atmospheric Loss -- ; 5.2. Antenna Misalignment -- ; 5.3. Polarization Loss -- ; 5.4. Rain Loss -- ; 6. Satellite Links -- ; 6.1. Link Geometry -- ; 6.1.1. Looking Down -- ; 6.1.2. Plug in Some Orbit Numbers -- ; 6.1.3. Looking Up -- ; 6.2. Uplinks -- ; 6.2.1. Command Links -- ; 6.2.2. Intercept Links -- ; 6.3. Downlinks -- ; 6.3.1. Telemetry Link -- ; 6.3.2. Data Link -- ; 6.3.3. Links to Data Users -- ; 6.3.4. Jamming Links -- ; 6.4. Hostile Links -- ; 7. Link Vulnerability To Ew -- ; 7.1. Satellite Vulnerability -- ; 7.1.1. Space-Related Link Losses -- ; 7.1.2. Intercept -- ; 7.1.3. Spoofing -- ; 7.1.4. Jamming -- ; 7.1.5. Problems Worked in This Chapter -- ; 7.2. Downlink Intercept -- ; 7.2.1. Geocentric Angle from the Satellite to the Intercept Site -- ; 7.2.2. Range from the Satellite to the Intercept Site -- ; 7.2.3. Is the Satellite Above the Horizon from the Intercept Site? -- ; 7.2.4. How Strong Is the Downlink Signal at the Intercept Site -- ; 7.2.5. Intercept with Directional Antennas -- ; 7.2.6. Angles Relative to the Ground Control Station -- ; 7.2.7. Angles Relative to the Hostile Intercept Site -- ; 7.2.8. Received Signal at the Intercept Site -- ; 7.2.9. What Is the Quality of the Intercepted Downlink Signal? -- ; 7.3. Intercepting Uplinks -- ; 7.4. Jamming Downlinks -- ; 7.4.1. The Satellite Downlink -- ; 7.4.2. The Jammer Link -- ; 7.4.3. The J/S Formula -- ; 7.5. Jamming Satellite Uplinks -- ; 7.5.1. The Jamming Link -- ; 7.5.2. Jamming Link Loss -- ; 7.5.3. Gain of 4-m Jamming Antenna at 5 GHz -- ; 7.5.4. Jammer ERP -- ; 7.5.5. The Satellite Uplink -- ; 7.5.6. Gain of 2-m Uplink Transmitter Antenna -- ; 7.5.7. Uplink ERP -- ; 7.5.8. Uplink Loss -- ; 7.5.9. Gain and Bandwidth of the Uplink Receiving Antenna on the Satellite -- ; 7.5.10. Antenna 3-dB Beamwidth -- ; 7.5.11. Offset of the Jammer from the Downlink Receiving Antenna -- ; 7.5.12. The J/S -- ; 7.6. Electronic Protection of Satellite Links -- ; 7.6.1. Attacks on Links -- ; 7.6.2. Protection Against Jamming -- ; 8. Duration And Frequency Of Observations -- ; 8.1. Calculating the Distance to the Horizon -- ; 8.2. Horizon Distances for Circular Orbits -- ; 8.3. Calculating the Duration of Target Availability from a Satellite -- ; 8.3.1. Geocentric Viewing Angle -- ; 8.3.2. Time During Which a Satellite Can See a Point on the Earth -- ; 8.3.3. The Impact of the Movement of the Earth -- ; 8.3.4. Viewing Time Formula -- ; 8.4. Doppler Shift in Satellite Link -- ; 8.4.1. Doppler Shift Formula -- ; 8.4.2. Receiving Site Velocity -- ; 8.4.3. Satellite Velocity -- ; 8.4.4. General Formula for Maximum Doppler Shift -- ; 8.4.5. General Formula for the Doppler Shift -- ; 9. Intercept From Space -- ; 9.1. Intercept of Radar Signal from Low-Earth Satellite -- ; 9.1.1. Link Loss -- ; 9.1.2. LOS Loss -- ; 9.1.3. Atmospheric and Rain Loss -- ; 9.1.4. Can the Satellite Payload Receive the Signal? -- ; 9.1.5. Receiver Sensitivity -- ; 9.1.6. Link Margin -- ; 9.1.7. Could the Satellite Receive the Signal from Its Horizon? -- ; 9.1.8. How Long Will the Satellite See the Signal? -- ; 9.2. Horizon Plot on the Earth -- ; 9.3. Intercept of the Earth Surface Target Using a Narrow-Beam Receiving Antenna -- ; 9.3.1. Antenna Pointing -- ; 9.3.2. Intercept Link Equation -- ; 9.3.3. Link Losses -- ; 9.3.4. Intercept from the Horizon -- ; 9.4. Intercept from the Synchronous Satellite -- ; 9.4.1. With the Satellite on the Horizon -- ; 9.4.2. With the Satellite Directly Overhead -- ; 10.

Jamming From Space -- ; 10.1. Jamming of a Ground Signal from a Satellite -- ; 10.2. Jamming from a Satellite -- ; 10.3. Jamming of a Communications Network -- ; 10.3.1. The Network -- ; 10.3.2. Link Equations -- ; 10.3.3. J/S -- ; 10.4. Jamming a Microwave Digital Data Link -- ; 10.5. Jamming of a Ground Radar from Space -- ; 10.5.1. Radar Jamming from a Satellite -- ; 10.5.2. The Jammed Radar and Its Target -- ; 10.5.3. The Jammer -- ; 10.5.4. The Jamming Equation -- ; 10.5.5. The Jamming Adequacy -- ; 10.5.6. Protecting an Asset with Low Radar Cross-Section -- ; 10.5.7. Duration of Jamming -- ; A. FORMULAS FROM SIGNAL INTELLIGENCE AND EW -- ; A.1. Intercept Formulas -- ; A.1.1. Successful Intercept -- ; A.1.2. The Intercept Link Equation -- ; A.1.3. Received Signal Quality -- ; A.2. Communication Jamming -- ; A.2.1. Successful Communications Jamming -- ; A.2.2. Communications J/S -- ; A.2.3. Communications EP -- ; A.3. Radar Jamming -- ; A.3.1. Successful Radar Jamming -- ; A.3.2. Self-Protection Jamming -- ; A.3.3. Stand-Off Jamming -- ; A.3.4. Required J/S -- ; A.3.5. Radar EP -- ; B. Important Numbers For Space EW -- ; C. Decibel Math -- ; C.1. Decibel Numbers -- ; C.2. Conversion to Decibel Form -- ; C.3. Absolute Values in Decibel Form -- ; C.4. Decibel Forms of Equations -- ; C.5. Quick Conversions to Decibel Values.
