

1. Record Nr.	UNISA996483071503316
Autore	Cacuci Dan Gabriel
Titolo	The nth-order comprehensive adjoint sensitivity analysis methodology . Volume 1 : overcoming the curse of dimensionality : linear systems // Dan Gabriel Cacuci
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	9783030963644 9783030963637
Descrizione fisica	1 online resource (373 pages)
Disciplina	629.8312
Soggetti	Sensitivity theory (Mathematics) Linear systems - Mathematical models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Contents -- Chapter 1: Motivation: Overcoming the Curse of Dimensionality in Sensitivity Analysis, Uncertainty Quantification, and Predict... -- 1.1 Introduction -- 1.2 Need for Computation of High-Order Response Sensitivities: An Illustrative Example -- 1.2.1 Sensitivity Analysis -- 1.2.2 Uncertainty Quantification: Moments of the Response Distribution -- 1.3 The Curse of Dimensionality in Sensitivity Analysis: Computation of High-Order Response Sensitivities to Model Parameters -- 1.4 The Curse of Dimensionality in Uncertainty Quantification: Moments of the Response Distribution in Parameter Phase-Space -- 1.4.1 Expectation Value of a Response -- 1.4.2 Response-Parameter Covariances -- 1.4.3 Covariance of Two Responses -- 1.4.4 Triple Correlations Among Responses and Parameters -- 1.4.5 Quadruple Correlations Among Responses and Parameters -- 1.5 Chapter Summary -- Chapter 2: The nth-Order Comprehensive Adjoint Sensitivity Analysis Methodology for Response-Coupled Forward/Adjoint Linear Sy... -- 2.1 Introduction -- 2.2 Mathematical Modeling of Response-Coupled Linear Forward and Adjoint Systems -- 2.3 The First-Order Comprehensive Sensitivity Analysis Methodology for Response-Coupled Linear Forward and Adjoint Systems (1s... -- 2.4 The Second-Order Comprehensive

Sensitivity Analysis Methodology for Response-Coupled Linear Forward and Adjoint Systems (2... -- 2.5 The Third-Order Comprehensive Sensitivity Analysis Methodology for Response-Coupled Linear Forward and Adjoint Systems (3r... -- 2.6 The Fourth-Order Comprehensive Sensitivity Analysis Methodology for Response-Coupled Linear Forward and Adjoint Systems (4... -- 2.7 The nth-Order Comprehensive Adjoint Sensitivity Analysis Methodology for Response-Coupled Forward/Adjoint Linear Systems (... -- 2.7.1 The Pattern Underlying the nth-CASAM-L for $n = 1, 2, 3, 4$. 2.7.2 The Pattern Underlying the nth-CASAM-L: Arbitrarily High-Order n -- 2.7.3 Proving That the Framework for the nth-CASAM-L also Holds for the $(n + 1)$ th-CASAM-L -- 2.8 The Fifth-Order Comprehensive Adjoint Sensitivity Analysis Methodology for Coupled Forward/Adjoint Linear Systems (5th-CAS... -- 2.9 Chapter Summary -- Chapter 3: Illustrative Applications of the nth-CASAM-L to Paradigm Physical Systems with Imprecisely Known Properties, Intern... -- 3.1 Introduction -- 3.2 Transmission of Particles Through Media -- 3.2.1 Point-Detector Response -- 3.2.2 Particle Leakage Response -- 3.2.3 Reaction Rate Response -- 3.2.4 Contribution-Response Flux -- 3.3 Application of the 1st-CASAM-L to Compute First-Order Response Sensitivities to Imprecisely Known Parameters -- 3.3.1 Point-Detector Response -- 3.3.2 Particle Leakage Response -- 3.3.3 Reaction Rate Response -- 3.3.4 Contribution-Response -- 3.4 Application of the 2nd-CASAM-L to Compute Second-Order Response Sensitivities to Imprecisely Known Parameters -- 3.4.1 Determination of the Second-Order Sensitivities of the Form $2(\dots)/i()$, $i = 1, \dots, TP$ -- 3.4.2 Determination of the Second-Order Sensitivities of the Form $2(\dots)/ib2$, $i = 1, \dots, TP$ -- 3.4.3 Summary of Main Features Underlying the Computation of the Second-Order Sensitivities $2(\dots)/ij$, $i, j = 1, \dots, TP$ -- 3.5 Application of the 3rd-CASAM-L to Compute Third-Order Response Sensitivities to Imprecisely Known Parameters -- 3.5.1 Determination of the Third-Order Sensitivities of the Form $3(\dots)/i()$, $i = 1, \dots, TP$ -- 3.5.2 Determination of the Third-Order Sensitivities of the Form $3(\dots)/ib1b2$, $i = 1, \dots, TP$ -- 3.6 Illustrative Application of the 4th-CASAM-L to a Paradigm Time-Evolution Model. 3.6.1 Applying the 1st-CASAM-L to Compute the first-Order Sensitivities to Model Parameters, Including Imprecisely Known Initi... -- 3.6.2 Applying the 2nd-CASAM-L to Compute the Second-Order Response Sensitivities to Model Parameters, Including Imprecisely K... -- 3.6.2.1 Second-Order Sensitivities Corresponding to $R1(\dots)/i$, $i = 1, \dots, N$ -- 3.6.2.2 Second-Order Sensitivities Corresponding to $R1(\dots)/ni$, $i = 1, \dots, N$ -- 3.6.2.3 Second-Order Sensitivities Corresponding to $R1(\dots)/in$ -- 3.6.2.4 Second-Order Sensitivities Corresponding to $R1(\dots)/td$ -- 3.6.2.5 Second-Order Sensitivities Corresponding to $R1(\dots)/\dots$ -- 3.6.2.6 Independent Mutual Verification of Adjoint Sensitivity Functions -- 3.6.2.7 Aggregating Model Parameters to Reduce the Number of Large-Scale Adjoint Computations for Determining the Second-Order... -- 3.6.2.8 Illustrative Computation of Third- and Fourth-Order Sensitivities Using Aggregated Model Parameters -- 3.6.3 Applying the nth-CASAM-L to Compute Sensitivities of the Average Concentration Response to Model Parameters, Including I... -- 3.6.3.1 First-Order Sensitivities -- 3.6.3.2 Second-Order Sensitivities -- 3.7 Chapter Summary -- Chapter 4: Sensitivity Analysis of Neutron Transport Modeled by the Forward and Adjoint Linear Boltzmann Equations -- 4.1 Introduction -- 4.2 Paradigm Physical System: Neutron Transport in a Multiplying Medium with Source -- 4.3 Application of the 1st-CASAM-L to Determine the

First-Order Sensitivities of $R(+)$ -- 4.4 Application of the 2nd-CASAM-L to Determine the Second-Order Sensitivities of $R(+)$ -- 4.4.1 Determination of the Second-Order Sensitivities of the Form -- 4.4.2 Determination of the Second-Order Sensitivities of the Form -- 4.4.3 Determination of the Second-Order Sensitivities of the Form -- 4.4.4 Determination of the Second-Order Sensitivities of the Form. 4.4.5 Determination of the Second-Order Sensitivities of the Form -- 4.4.6 Determination of the Second-Order Sensitivities of the Form -- 4.4.7 Determination of the Second-Order Sensitivities of the Form -- 4.5 Second-Order Sensitivity Analysis of the Schwinger and Roussopoulos Functionals -- 4.5.1 Application of the 1st-CASAM-L to Determine the First-Order Sensitivities of the Roussopoulos and Schwinger Functionals ... -- 4.5.2 Application of the 2nd-CASAM-L to Determine the Second-Order Sensitivities of the Schwinger and Roussopoulos Functionals... -- 4.5.2.1 Determination of the Second-Order Sensitivities of the Form -- 4.5.2.2 Determination of the Second-Order Sensitivities of the Form -- 4.5.2.3 Determination of the Second-Order Sensitivities of the Form -- 4.5.2.4 Determination of the Second-Order Sensitivities of the Form -- 4.5.2.5 Determination of the Second-Order Sensitivities of the Form -- 4.5.2.6 Determination of the Second-Order Sensitivities of the Form -- 4.6 Chapter Summary -- Chapter 5: Concluding Remarks -- References -- Index.

2. Record Nr.	UNINA9910954258303321
Autore	Middlemas Jill Anne <1971->
Titolo	The troubles of templeless Judah / / Jill Middlemas
Pubbl/distr/stampa	New York, : Oxford University Press, 2005
ISBN	9780191536274 019153627X 0-19-160345-7 1-281-92522-5 1-4356-9973-4 9786611925222 0-19-153627-X
Descrizione fisica	xv, 288 p
Collana	Oxford theological monographs
Disciplina	296/.09/04
Soggetti	Judaism - History - Post-exilic period, 586 B.C.-210 A.D Jews - History - 586 B.C.-70 A.D Palestine History To 70 A.D
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Revision of the author's thesis (doctoral)--University of Oxford, 2003.
Nota di bibliografia	Includes bibliographical references (p. [236]-272) and indexes.
Nota di contenuto	The Social and Historical Situation in Templeless Judah -- Conceptions of Judah, I : Idolatrous Cults -- Conceptions of Judah, II : Yahwistic Worship -- The Voice of the Land Lamentations.
Sommario/riassunto	The period of the Babylonian captivity (c.587-539 BCE) was of seminal importance for the formation of the Hebrew Bible as well as for the religious development of Judaism. Jill Middlemas examines the theological thought of the community that remained behind in Judah after the Babylonian army destroyed the Jerusalem Temple and deported the king and most of the leadership.