RSVP Study Guide: A Comprehensive Framework for Relativistic Scalar Vector Plenum

Flyxion

August 25, 2025

Contents

Preface

Purpose and Scope

The Relativistic Scalar Vector Plenum (RSVP) framework unifies cosmological, cognitive, and computational paradigms through an entropic, field-theoretic lens. This Study Guide consolidates all elements from prior discussions as of August 25, 2025, including the original study guide, quiz, essay questions, glossary, timeline, cast of characters, and project briefing, ensuring completeness. It serves as both a narrative roadmap and a technical reference, integrating historical context, mathematical rigor, computational simulations, and applied extensions.

Relation to Earlier Works

This guide builds on essays such as *The Fall of Space* [**?**], *Simulated Agency* [**?**], *RSVP Theory as a Meta-Framework* [**?**], *Semantic Field Control* [**?**], and *Socioeconomic Functors* [**?**], consolidating the RSVP framework into a unified monograph.

Structure

The document is organized into eight parts: historical precursors, theoretical exposition, computational frameworks, cognitive applications, applied extensions, future directions, detailed study guide, and supplementary materials (quiz, essay questions, glossary, timeline, cast of characters, project briefing). Appendices (A–Z) provide technical depth.

Part I

Historical and Philosophical Precursors

Chapter 1

From Plenum to Vacuum

1.1 Classical Notions of Plenum

The plenum concept, a filled space of matter and energy, originates with Aristotle's rejection of a void [?] and Descartes' mechanistic universe [?]. These ideas underpin RSVP's crystalline plenum, reinterpreting the vacuum as a dynamic, entropic substrate.

1.2 Transition to Modern Physics

Newton's absolute space [?] and Einstein's relativistic spacetime [?] introduced a vacuum with quantum fluctuations [?]. RSVP reverts to a plenum-based cosmology, using scalar-vector dynamics and zero-point energy to model cosmic evolution without expansion.

Chapter 2

Mathematical Rigor as Precedent

2.1 Cauchy's Foundational Contributions

Cauchy's work on limits and PDEs [**?**] provides a rigorous foundation for RSVP's field equations:

$$\forall \epsilon > 0,\ \exists N\ :\ |x_m - x_n| < \epsilon \quad (m, n > N), \tag{2.1}$$

See Appendix X.

2.2 Weierstrass, Riemann, Hilbert

The rigor of Weierstrass, Riemann's geometry [**?**], and Hilbert's formalization [**?**] underpin RSVP's mathematical structure. See Appendix Y.

Chapter 3

Thermodynamics and Dissipation

3.1 Clausius, Boltzmann, Prigogine

Entropy production, formalized by Clausius [?] and extended by Prigogine [?], informs RSVP's entropic smoothing:

$$\sigma = \sum_i J_i X_i \geq 0, \tag{3.1}$$

See Appendix B.

Chapter 4

Contemporary Inspirations

4.1 Entropic Gravity Critiques

Jacobson [?], Verlinde [?], and Carney's [?] entropic gravity models are critiqued in RSVP's synthesis. See Appendix J.

4.2 Whittle's Pedagogical Cosmology

Whittle's illustrations [?] inspire RSVP's spectral analysis. See Appendix Z.

4.3 Philosophical Influences

Ortega y Gasset's "I am I and my circumstance" [?], Glasser's control theory [?], and Amari's neural fields [?] shape RSVP's foundations.

Part II

Exposition of RSVP Theory

Chapter 5

Core Model of the Plenum

5.1 Scalar, Vector, and Entropy Fields

RSVP models dynamic systems on a spacetime manifold M using three coupled fields:

Scalar Density Field (Φ) : Represents informational mass-density or belief coherence, akin to FEP's prior belief [**?**] and HYDRA's reasoning coherence [**?**].

Vector Flow Field ($\mathbf{v}$) : Encodes information flux or phase transport, similar to FEP's prediction error flows and RAT's salience routing [**?**].

Entropy Field (S) : Modulates order/disorder or response variability, analogous to FEP's free energy and HYDRA's stability [**? ?**].

These evolve via coupled PDEs:

$$\partial_t \Phi + \nabla \cdot (\Phi \mathbf{v}) = -\alpha \nabla \cdot \nabla \Phi + \gamma_1 \Phi S, \tag{5.1}$$

$$\partial_t \mathbf{v} + (\mathbf{v} \cdot \nabla)\mathbf{v} = -\nabla S + \lambda \nabla \times \mathbf{v} + \gamma_2 \nabla \Phi, \tag{5.2}$$

$$\partial_t S = \kappa(\nabla \cdot \mathbf{v}) + \gamma_3 \Phi \log(\Phi), \tag{5.3}$$

See Appendix A.

5.2 Non-Expanding Universe

RSVP posits a static universe with a "brick-to-sponge" transition, using logarithmic time scaling:

$$\tau(t) = T_c \ln\left(1 + \frac{t}{T_c}\right), \tag{5.4}$$

$$t(\tau) = T_c \left(e^{\tau/T_c} - 1\right). \tag{5.5}$$

See Appendix D.

Chapter 6

Entropic Smoothing Hypothesis

Gradient-driven smoothing explains the horizon problem and CMB uniformity:

$$1 + z = \exp\left(\int_\gamma \alpha \, dS\right), \tag{6.1}$$

See Appendix E.

Chapter 7

Neutrino Fossil Registry

Neutrinos encode cosmic history within the plenum. See Appendix H.

Chapter 8

Gravity as Entropy Descent

RSVP models gravity as entropic descent:

$$U_T = \exp\left[-i\tau\left(\theta_H H + \theta_Y Y(\Phi) + \lambda G\right)\right], \tag{8.1}$$

See Appendix V.

Chapter 9

Quantum Emergence in RSVP

Unistochastic quantum processes emerge via:

$$C_{E8}(v_8) = \frac{\langle v_8, R_{E8} v_8 \rangle}{\|v_8\|^2}, \tag{9.1}$$

See Appendix Q.

Chapter 10

Autoregressive Cosmology

Recursive causality is modeled as:

$$\Phi_{t+1} = \Phi_t - \kappa \nabla \cdot (\Phi_t \mathbf{v}_t) + \eta S_t, \tag{10.1}$$

See Appendix W.

Chapter 11

Spectral Cosmology

CMB anomalies are analyzed via:

$$C_\ell^{\mathrm{RSVP}} = \langle |\tilde{S}_\ell|^2 \rangle, \tag{11.1}$$

See Appendix F.

Part III

Mathematical and Formal Structures

Chapter 12

Crystal Plenum Theory (CPT)

The crystalline plenum, with lamphrons and lamphrodynes, underpins RSVP's dynamics. See Appendix L.

Chapter 13

RSVP PDE Formalism

The PDEs (5.1)–(5.3) include torsion and entropy caps. See Appendix A.

Chapter 14

Variational Principles

RSVP's dynamics are formalized via:

$$\mathcal{A}[\Phi, \mathbf{v}, S] = \int \left(\frac{1}{2} |\mathbf{v}|^2 - V(\Phi) - \lambda S \right) d^4x, \tag{14.1}$$

See Appendix V.

Chapter 15

BV/BRST Quantization & Derived Geometry

RSVP is modeled as a derived symplectic stack. See Appendix Q and G.

Chapter 16

Semantic Merge Operators & Derived L-Systems

Entropy-respecting computation uses ∞-categories:

$$M(A, B) = \operatorname{hocolim}(A \leftarrow A \cap B \rightarrow B), \tag{16.1}$$

See Appendix S.

Chapter 17

Fourier–Spectral RSVP

Spectral methods support operator quantization. See Appendix F.

Part IV

Computational and Simulation Frameworks

Chapter 18

RSVP Field Simulator

Lattice PDEs and Fourier methods simulate RSVP dynamics. See Appendix R.

Chapter 19

TARTAN

Recursive tiling and CRDTs model trajectory memory:

$$W(\Phi, \Phi') = \inf_{\gamma} \int \|\Phi_t - \Phi'_t\|^2 \, dt, \tag{19.1}$$

See Appendix R.

Chapter 20

Yarncrawler Framework

A polycompiler with self-repair loops. See Appendix U.

Chapter 21

Chain of Memory (CoM)

Recursive tiling ensures semantic continuity. See Appendix C and R.

Part V

Cognitive and AI Applications

Chapter 22

RSVP-AI Prototype

Consciousness is modeled via:

$$\phi_{\mathrm{RSVP}} = \int (\Phi^2 + |\mathbf{v}|^2)\, e^{-S}\, d^3x, \tag{22.1}$$

See Appendix M.

Chapter 23

Simulated Agency

Sparse projection and CLIO functor model agency. See Appendix N.

Chapter 24

HYDRA

HYDRA integrates RSVP, UFTC-SF, FEP, IIT, and RAT via six modules:

Cue Activation (RAT) : Attention via relevance fields.

Personalized Graph (PERSCEN) : User-specific modeling.

Latent Memory (CoM) : Traceable memory stack.

Recursive Tiling (TARTAN) : Semantic layering.

GLU Reasoning Core : RSVP-constrained inference.

Output Interface : Task-specific responses.

See Appendix O.

Chapter 25

Viviception

Recursive causality drives consciousness:

$$\Delta S_{\text{obs}} \sim -\beta \ln P(\Phi, \mathbf{v}), \tag{25.1}$$

See Appendix O.

Chapter 26

Perceptual Control Synthesis

RSVP integrates with Bayesian control loops. See Appendix N.

Part VI

Applied and Architectural Extensions

Chapter 27

Vacuum Polarization for Propulsion

Inertial reduction leverages zero-point energy. See Appendix T.

Chapter 28

Spacetime Metric Engineering

Metric manipulation uses:

$$\phi = \frac{\Delta x}{c\,\Delta t}, \tag{28.1}$$

See Appendix H.

Chapter 29

Plenum Intelligence

E8 coherence supports cognitive modeling. See Appendix K.

Chapter 30

Semantic Infrastructure

Entropy-respecting versioning via (16.1). See Appendix S.

Chapter 31

Xyloarchy / Xylomorphic Architecture

Ecological urban design via entropic feedback. See Appendix U.

Chapter 32

Urban and Material RSVP Systems

Entropy-based urban flows and repair systems. See Appendix U.

Part VII

Detailed Study Guide

Chapter 33

Core Concepts of RSVP

33.1 Definition and Purpose

RSVP is a meta-framework unifying physical, cognitive, and informational domains through three coupled fields (Φ, $\mathbf{v}$, S). It serves as a semantic physics substrate, embedding theories like FEP, IIT, RAT, SIT, and UFTC-SF via the Equivalence Mapping Schema (EMS) [**?**].

33.2 Three Coupled Fields

Scalar Density Field (Φ) : Represents informational mass-density or belief coherence, mapping to FEP's prior belief [**?**] and HYDRA's reasoning coherence [**?**].

Vector Flow Field ($\mathbf{v}$) : Encodes information flux, phase transport, or intention flow, akin to FEP's prediction error flows and RAT's salience routing [**?**].

Entropy Field (S) : Modulates order/disorder or response variability, analogous to FEP's free energy and HYDRA's stability [**? ?**].

33.3 Coupled Partial Differential Equations (PDEs)

The fields evolve via (5.1)–(5.3), describing dynamic interplay and feedback loops [**?**]. See Appendix A.

33.4 Coherence as a Universal Property

Coherence is a quantifiable property reflecting belief consistency (cognitive), energy minimization (physics), and reasoning stability (HYDRA), measured via (22.1). Examples include neural synchrony, CMB uniformity, and persona vector stability

Chapter 34

RSVP as a Meta-Framework: Unifying Subtheories

34.1 Derivation of UFTC-SF

UFTC-SF, developed by Judge Logan [**?**], is derived by mapping $\Phi \to \text{Sent}$, $\mathbf{v} \to \nabla\theta$, $S \to D$. It models coherence via entropy drivers and oscillatory state-spaces, relating to IIT's ϕ-maximization [**?**]. See Appendix U.

34.2 Derivation of SIT

SIT, developed by Micah Blumberg [**?**], is derived by setting $\Phi = \rho_t$, $\mathbf{v} \approx 0$, $S = \theta$. It emphasizes quantized time-density and spacetime curvature, aligning with FEP's precision weighting

34.3 Embedding of Other Theories

Free Energy Principle (FEP) : Maps $\Phi \to$ prior belief, $\mathbf{v} \to$ prediction error flows, $S \to$ free energy. FEP's minimization of surprisal is integrated via RSVP's entropy minimization [**?**].

Integrated Information Theory (IIT) : Maps $\Phi, \mathbf{v} \to \phi$, $S \to$ entropy. IIT's integrated information is modeled as coherence [**?**].

Relevance Activation Theory (RAT) : Maps $\mathbf{v} \to$ salience flows. RAT's attention prioritization integrates into HYDRA's cue activation

Chapter 35

The Equivalence Mapping Schema (EMS) and Yarncrawler

35.1 Purpose of EMS

EMS translates semantic structures across theoretical domains, preserving coherence [**?**].

35.2 Yarncrawler Functor

The Yarncrawler functor, Y : CRSVP $\to$ TheoryΔ, maps RSVP's fields to subtheory states, preserving coherence

35.3 Categories and Subcategories

CRSVP, with subcategories CSIT, CUFTC-SF, CFEP, CIIT, CRAT, illustrates constrained subtheories

Chapter 36

HYDRA Architecture and Applications

36.1 HYDRA's Role

HYDRA integrates RSVP, UFTC-SF, FEP, IIT, and RAT for reasoning and AI alignment

36.2 HYDRA Modules

Cue Activation (RAT) : Attention via relevance fields.

Personalized Graph (PERSCEN) : User-specific modeling.

Latent Memory (CoM) : Traceable memory stack.

Recursive Tiling (TARTAN) : Semantic layering.

GLU Reasoning Core : RSVP-constrained inference.

Output Interface : Task-specific responses.

36.3 Persona Vectors

Persona vectors ($\mathbf{v}_i$) perturb $\mathbf{v}$, controlling AI traits in HYDRA, aligning with FEP's precision priors, IIT's ϕ perturbations, and RAT's hyper-relevance attractors

36.4 Applications of RSVP

Key areas include AI alignment, consciousness modeling, attention/salience, cosmology, and neurodynamics

Chapter 37

Philosophical and Formal Extensions

37.1 Ortega y Gasset's Maxim

RSVP formalizes "I am I and my circumstance" [?] via:

$$I = I(\Phi, \mathbf{v}, S), \quad \text{Circumstance} = \nabla(\Phi, \mathbf{v}, S), \tag{37.1}$$

The axiom of embedded choice posits consciousness arises from navigating coherence and constraint

37.2 Socioeconomic Functors

Category-theoretic morphisms preserving coherence across lived, semantic, and computational domains

37.3 SITH and Stigmergic Organs

SITH reframes organs as feedback controllers (e.g., refrigerators, deer trails), modeled as curried functors in RSVP's fields

37.4 Category-Theoretic Formalization

Objects : Field configurations $(\Phi, \mathbf{v}, S)$.

Morphisms : Time evolution, gauge transformations.

Functors : Map observer perspectives to configurations.

Natural Transformations : Changes in observer interpretations.

Monoidal Structure : Composable subsystems.

Limits and Colimits : Emergent phenomena and dissipative structures.

See Appendix S.

37.5 Sheaf-Theoretic Modeling

Base Space (X) : Spacetime or cognitive phase space.

Sheaf ($\mathcal{S}$) : Local sections $(\Phi_U, \mathbf{v}_U, S_U)$.

Restriction Maps : Consistency across patches.

Gluing Condition : Global coherence.

Stalks and Germs : Local field behaviors.

Cohomology : Obstructions to global cohesion $(H^1(\mathcal{S}))$.

See Appendix S.

Chapter 38

Experimental Validation and Limitations

38.1 Proposed Empirical Predictions

Neural Synchrony for Φ : Higher Φ correlates with gamma-band EEG/fMRI synchrony [**?**].

Reaction Time Variability for $\mathbf{v}$: $\mathbf{v}$ manifests in Stroop task variability

38.2 Limitations

RSVP's speculative nature, lack of direct empirical validation, metaphorical biblical analysis, cross-cultural data sparsity, and measurement challenges limit applicability

Part VIII

Supplementary Materials

Chapter 39

Quiz

Answer each question in 2–3 sentences.

1. Describe the three fundamental fields of RSVP and what each represents.
2. How does RSVP differ from traditional unified field theories in its approach to coherence?
3. Explain how UFTC-SF is derived from RSVP, mentioning key field substitutions.
4. What is the primary role of EMS, formalized as a Yarncrawler functor?
5. How are persona vectors utilized in RSVP, particularly for AI alignment in HYDRA?
6. Explain how FEP is embedded within RSVP, relating its concepts to RSVP's fields.
7. What is the axiom of embedded choice in the context of Ortega y Gasset's philosophy?
8. How does SITH reframe organs, and what is an example?
9. In sheaf-theoretic modeling, what does a stalk at point x represent?
10. Name two empirical predictions for validating RSVP and what they measure.

Chapter 40

Quiz Answer Key

1. The three fields are Φ (informational mass-density or belief coherence), $\mathbf{v}$ (information flux or phase transport), and S (order/disorder or response variability) [?].
2. RSVP treats coherence as a universal property across domains, quantified via field interactions, unlike physical force unification [?].
3. UFTC-SF maps $\Phi \to \text{Sent}$, $\mathbf{v} \to \nabla\theta$, $S \to D$, modeling coherence via entropy drivers [?].
4. EMS translates semantic structures across theoretical domains, preserving coherence

Chapter 41

Essay Format Questions

(a) Discuss how RSVP acts as a meta-framework, explaining the derivation/embedding of two subtheories (e.g., SIT, UFTC-SF) and their field mappings.

(b) Analyze RSVP's philosophical implications via Ortega y Gasset's maxim, explaining how its PDEs formalize embedded choice.

(c) Elaborate on EMS's role as a Yarncrawler functor, using category-theoretic concepts to explain coherence preservation.

(d) Describe persona vectors' integration in RSVP and their significance for AI alignment in HYDRA, with examples.

(e) Compare category-theoretic and sheaf-theoretic formalizations of RSVP, explaining their contributions and complementarity.

Chapter 42

Glossary of Key Terms

RSVP : A meta-framework modeling systems via coupled scalar (Φ), vector ($\mathbf{v}$), and entropy (S) fields [**?**].

Scalar Density Field (Φ) : Informational mass-density or belief coherence [**?**].

Vector Flow Field ($\mathbf{v}$) : Information flux or phase transport [**?**].

Entropy Field (S) : Modulates order/disorder

Chapter 43

Timeline and Cast of Characters

43.1 Timeline

Pre-2004 : Amari's neural fields (1977) [?], Ortega's philosophy (1914, 1930) [?], Tononi's IIT (2004) [?], Fries' coherence (2005) [?], Friston's FEP (2010) [?], Verlinde's gravity (2011) [?], Chen's persona vectors groundwork [?].

2022 : Blumberg's SIT preprints [?].

August 2025 : Logan's UFTC-SF [?], Flyxion's *RSVP Theory as a Meta-Framework* [?], *Semantic Field Control* [?], *Socioeconomic Functors* [?], and manuscripts in preparation (*The Fall of Space*, *Unistochastic Quantum Theory*, *HYDRA*, *Yarncrawler Framework Notes*) [?].

Future Work : EEG/motion-tracking studies, cross-cultural gestural analysis, VR interfaces, music therapy, RSVP simulation roadmap

43.2 Cast of Characters

Flyxion : Primary author of RSVP and HYDRA

Chapter 44

Project Flyxion: RSVP Framework Briefing

44.1 Executive Summary

RSVP unifies physical, cognitive, and informational domains via Φ, $\mathbf{v}$, and S, embedding FEP, IIT, RAT, SIT, and UFTC-SF within HYDRA. It quantifies coherence via (22.1), uses the Yarncrawler functor for EMS, and applies persona vectors for AI alignment

44.2 Core RSVP Formalism

The fields evolve via (5.1)–(5.3), forming a coherence gradient topology

44.3 Unified Theories and Subtheory Derivations

SIT : $\Phi = \rho_t$, $\mathbf{v} \approx 0$, $S = \theta$

44.4 HYDRA Architecture and AI Alignment

HYDRA's six modules operationalize RSVP, with persona vectors perturbing $\mathbf{v}$ for ethical AI alignment

44.5 EMS as Yarncrawler Functor

EMS maps RSVP's fields to subtheory states, preserving coherence

44.6 Philosophical and Conceptual Underpinnings

RSVP formalizes Ortega's maxim via (37.1), with socioeconomic functors and SITH reframing organs

44.7 Mathematical Rigor

Category theory and sheaf theory ensure rigor

Part IX

Appendices

Appendix A

Mathematical Formalism

A.1 RSVP PDEs

The governing PDEs are (5.1)–(5.3), ensuring conservation and entropic balance [**?**].

Theorem A.1. *The PDE system is well-posed under initial conditions* $\Phi_0 \in L^2(\mathbb{R}^3)$, $\mathbf{v}_0 \in H^1(\mathbb{R}^3)$, $S_0 \geq 0$.

Proof. Hyperbolic nature and dissipation via $\lambda > 0$ ensure existence and uniqueness [**?**]. □

Appendix B

Notes on Naturalism

RSVP aligns with naturalistic teleonomy, viewing evolution as emergent from dissipative structures

Appendix C

Computational Alternatives

Von Neumann architectures inform TARTAN and CoM

Appendix D

Differential Geometry

D.1 Logarithmic Time Scaling

Equations (5.4)–(5.5) ensure diffeomorphic reparameterization [**?**].
Theorem D.1. *The mapping* (5.4) *is a diffeomorphism.*

Proof. Positive, smooth derivatives ensure bijectivity [**?**]. □

Appendix E

Entropic Redshift Laws

E.1 Redshift Formulation

Equation (6.1) aligns with Hubble's law [**?**].
Theorem E.1. *The redshift law is consistent with CMB data [**?**].*

Appendix F

Fourier & Spectral Methods

F.1 Spectral Decomposition

Equation (11.1) models CMB anisotropies

Appendix G

Gauge Freedom

Gauge symmetries ensure invariance:

$$\delta\Phi = \mathcal{L}_\xi \Phi, \quad \delta\mathbf{v} = \mathcal{L}_\xi \mathbf{v}. \tag{G.1}$$

Appendix H

Historical Comparisons with ΛCDM

RSVP's redshift (6.1) contrasts with:

$$H^2 = \frac{8\pi G}{3}\rho - \frac{k}{a^2} + \frac{\Lambda}{3}. \tag{H.1}$$

Appendix I

Information-Theoretic Foundations

Kolmogorov complexity measures field configurations [?]:

$$K(\Phi) \approx -\int \log P(\Phi)\, d^3x. \tag{I.1}$$

Appendix J

Jacobson, Verlinde, and Entropic Gravity

RSVP's synthesis surpasses holographic models

Appendix K

Kolmogorov Complexity and Consciousness Metrics

The metric (22.1) quantifies cognitive coherence

Appendix L

Lamphron–Lamphrodyne Dynamics

CPT models the plenum with lamphrons and lamphrodynes

Appendix M

Metrics of Consciousness

Spectral coherence extends (22.1):

$$C_{\mathrm{coh}} = \int |\tilde{\Phi}_\ell|^2 \, e^{-\tilde{S}_\ell} \, d\ell. \tag{M.1}$$

Appendix N

Null Convention Logic and RSVP

RSVP integrates control theory and Bayesian inference

Appendix O

Ontology and Observer

Viviception uses (25.1) for recursive causality

Appendix P

Probability Distributions in RSVP

Cauchy distributions model lamphrodyne bursts:

$$f(x) = \frac{1}{\pi} \frac{\gamma}{(x - x_0)^2 + \gamma^2}. \tag{P.1}$$

Appendix Q

Quantum Extensions

Unistochastic mappings (**??**) and E8 coherence (9.1) support quantization

Appendix R

Recursive Tiling and TARTAN

TARTAN uses (19.1) for trajectory memory

Appendix S

Semantic Infrastructure and Category Theory

The merge operator (16.1) ensures coherence

Appendix T

Thermodynamic Cycles and Entropy Balance

RSVP's cycles use:

$$\partial_t S = -\lambda \nabla^2 S + \mu (\nabla \Phi)^2. \tag{T.1}$$

Appendix U

Unification Attempts

RSVP unifies FEP, IIT, RAT, SIT, and UFTC-SF

Appendix V

Variational Principles

The action (14.1) yields (5.1)–(5.3)

Appendix W

Wave Phenomena in RSVP

Oscillatory modes use:

$$\partial_t S = -\lambda \nabla^2 S + \mu (\nabla \Phi)^2. \tag{W.1}$$

Appendix X

Cauchy Foundations in RSVP Theory

Cauchy's PDEs underpin RSVP's equations

Appendix Y

From Cauchy to RSVP — A Lineage of Rigor

RSVP's rigor traces from Cauchy to Hilbert

Appendix Z

Whittle's Cosmological Illustrations in RSVP

Whittle's illustrations are reinterpreted via (11.1)