

Master Thesis: Stichwortzettel – was soll drin stehen?

Sven Köppel, koeppel@fias.uni-frankfurt.de

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Einordnung Papers nach Kapiteln

(N, Nico = Nicolini)

Rizzo2006 → NC + LxD
BleicherN2010 → Einführung LxD + LHC
Ansoldi → Regular Bhs
Isi Nov2013 → GUP + NC
N2008 → Review NCBH
Spalucci Smailgaci 2012 → Self-Complete
Cavaglia 02 → BH + Branes in TeV Gravity ($G \sim 8\pi$)
WinstantleyN2011 → Hawkin Emission from Bhs:
 Overview: Six families of QGBHs
Gingrich 2010 → NCBHs + LHC (Experimentalist)
KSM: Corr 2014 → BHGUP (GUP Varianten), LQG Erwähnung
KSM: Casadio → Length of QM Particle (Misner sharp?)
Modesto2011 → Holographic Effective Actions from Bhs
 (Emerging LQG)
 Log-Entropie-Korrekturen
Modesto2005 → LQBH
Dirkes2013 → Brauche keine minimal Length, GUP ndim?
KochBHossi2005 → Einführung/Übersicht
Kanti2004 → Review Bhs in LXD
N Aug 2010 → Ungravity, emergent Gravity Verlinde Argumentation
NSS 2006 → Gutes erstes NC-Paper

Haupt-Working-Papers

Knipfer2014
Nfeb 2014: GUP
NS2012 = NS 06.11.2013: Holographic Screens
MMN2010: Ultraviolet Complete

Weitere Stichworte

- Greybody-Factors
- Conjectures:
 - Hoop Conjecture
 - Verlinde Argumentation
- Ultraviolet Complete
- Dvali Paradigm
- Dvali Quantum N Portrait
- Area Quantization, Self-Completeness, Holography
- Reall Review (Schwarzschild-Tangherlini)

Energy Conditions
- Warum so wichtig?

Living Reviews
- LoopQG Reviews

Sonstiges:
- Jordan Lemma
- Eikonal Approximation for string scattering (NCG)
- Koma relations, Koma integrals → Mass

Noch mehr Stichworte

Curvature/Coordinate Singularity
Ev. Horizon Types
Cauchy Instability
Divergenz am Ursprung für Bhs? (naked singularity)

Gliederung

Gliederung inspiriert von PhD Benjamin Koch:
Abschnitt 1-4 (Mitglied der ehemaligen LxD Group
2005: Stöck., Bleich., Hossi, Koch)

1. Intro
2. The SM
 - Achievements
 - Lagrangian, Symmetries
 - Problems:
 - Large number of params
 - weak hierarchy problem
 - strong hierarchy problem
 - missing gravity
3. GR
 - Basics
 - Curves Space Effects
 - Limitations
4. Extra dimensions
 - Kaulza Klein!!
 - ADD model
 - Siehe auch Nico Palaver!
 - Randall Sundrum!
5. Remnants
 - Charged usw.
 - Consistent
6. Regular + SeLF encoding approaches
 - NC + GUP?
 - Black Hole-Theorie:
 - BH Thermodynamics
 - Curvature etc.
7. Holographic Principle
8. String Theory (1 Page)
LQG Theory → Modesto (1 Page)
Asymtotically Safe Gravity (1 Page)
 - Six Families of QG metric families
 - Minimal Length
 - Bardeen-Solution
 - Schwarzschild-Tangherlini-Solution
→ Exact Solutions