

Frontiers of topological quantum matter

Monday, 1 May 2017 - Friday, 5 May 2017

Geovetenskapens hus, Frescati campus, Stockholm University

Book of Abstracts

Contents

Registration & welcome	1
Frank Wilczek	1
Topological Superconductivity in Strontium Ruthenate: the Experimental Evidence, and Where Uncertainty Remains	1
Universalities of thermodynamic signatures in topological phases	1
Berry Phases of Berry Phases	1
Fingerprints of Topology on Dynamical Quantum Phase Transitions	1
Designer curved-space geometry for relativistic fermions in Weyl metamaterials	1
Regular	1
Discussions	2
Superconductivity provides access to the chiral magnetic effect of an unpaired Weyl cone	2
Quantized circular photogalvanic effect in Weyl semimetals	2
Strategies for discovering new topological semimetals	2
Regular	2
Inhomogeneous Weyl semimetals	2
Reflection-symmetric second-order topological insulators and superconductors	2
Topology, non-collinear spin structures and Skyrmions in Heusler compounds	3
Dirac Materials and Magnetism	3
Topological quantum chemistry	3
New results on Topological Insulators, Weyl Semimetals and Nodal-line Semimetals	3
Topologically nontrivial high-Tc superconducting phases in iridates and oxide heterostructures with strong spin-orbit coupling	3
Signatures of Relativistic Covariance in 3D Weyl Semimetals	3
(no title)	3

Regular	4
Fracton topological order via coupled layers	4
The anomalous de Haas-van Alphen effect and Excitons in a topological Kondo insulator	4
Kitaev spin liquids – from topological order to material synthesis	4
Jan Carl Budich	4
Tilted Weyl cones with interaction and disorder	4
regular	4
Universal quasi-steady states in periodically driven many-body systems	5
Monopole harmonic superconductivity in doped Weyl Semimetals	5
TBA	5
(no title)	5
Introduction	5
Registration	5
Poster session	5

250

Registration & welcome

251

Frank Wilczek

252

Topological Superconductivity in Strontium Ruthenate: the Experimental Evidence, and Where Uncertainty Remains

253

Universalities of thermodynamic signatures in topological phases

254

Berry Phases of Berry Phases

255

Fingerprints of Topology on Dynamical Quantum Phase Transitions

256

Designer curved-space geometry for relativistic fermions in Weyl metamaterials

257

Regular

258

Discussions

259

Superconductivity provides access to the chiral magnetic effect of an unpaired Weyl cone

260

Quantized circular photogalvanic effect in Weyl semimetals

261

Strategies for discovering new topological semimetals

262

Regular

263

Inhomogeneous Weyl semimetals

264

Reflection-symmetric second-order topological insulators and superconductors

265

Topology, non-collinear spin structures and Skyrmions in Heusler compounds

266

Dirac Materials and Magnetism

267

Topological quantum chemistry

268

New results on Topological Insulators, Weyl Semimetals and Nodal-line Semimetals

269

Topologically nontrivial high-T_c superconducting phases in iridates and oxide heterostructures with strong spin-orbit coupling

270

Signatures of Relativistic Covariance in 3D Weyl Semimetals

271

(no title)

272

Regular

273

Fracton topological order via coupled layers

274

The anomalous de Haas-van Alphen effect and Excitons in a topological Kondo insulator

275

Kitaev spin liquids – from topological order to material synthesis

276

Jan Carl Budich

277

Tilted Weyl cones with interaction and disorder

278

regular

279

Universal quasi-steady states in periodically driven many-body systems

280

Monopole harmonic superconductivity in doped Weyl Semimetals

281

TBA

282

(no title)

283

Introduction

284

Registration

285

Poster session