

A Brief Bibliography of Publications about the Kepler Conjecture

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Title word cross-reference

1 [ZCT⁺14]. 18 [Tal99]. 2 [IN07, ZCT⁺14]. 24 [BB16, CKM⁺16]. 3
[IN07, LZLX10]. 8 [BB16, Via16]. E_8 [CKM⁺19]. N
[CGV⁺03, CF10, Hau91, Hau95]. R^d [PKC16]. S [Kun92].

-Cube [Hau95, Hau91]. **-dimensional** [ZCT⁺14]. **-space** [ZCT⁺14]. **-units**
[Kun92].

12th [AL01]. **15th** [MS02]. **16** [Hsi95]. **17th** [SBG04]. **18th** [HM05]. **1900**
[Hil00, Hil01].

2002 [MS02, STDH02]. **24-dimensional** [Kla19].

3-dimensional [Oes00]. **3-polytopes** [BH00].

4th [HY14, IEE07].

6th [BR07].

82 [TS10b]. **88** [Mus98].

95g [Hsi95].

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highly [Kla19]. **Hilbert** [Jos12]. **Historical** [Hal06a]. **history**
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object [BS08]. **objects** [LZLX10]. **octahedra** [GEK11]. **oldest** [Szp03a]. **One** [CM00, Kla19, Bra95, Rén58, Szp03a]. **one-dimensional** [Rén58]. **Online** [LMX19, ZCT⁺14]. **Optimal** [CM00, JST09, Kup07, PAHG12, Szi93, TS06, Wan00, ZBT⁺99, CK91, EDM09, MPS02, SST08]. **optimalen** [MPS02]. **optimality** [CKM⁺19]. **Optimally** [BW01]. **Optimization** [Cor01]. **Optimized** [PKC16]. **Orange** [Cor02]. **Orbits** [Rad04]. **Orbs** [Rad04]. **Order** [THBM07, HM05, SBG04]. **Organizing** [TJ12]. **other** [Gar01a]. **overlapping** [BDH⁺05]. **overview** [Hal06a]. **Oxford** [HM05].

P [Lag11b, Oes00]. **P.** [TL06]. **package** [BDH⁺05]. **Packed** [Ste99, HAEK⁺09]. **Packing** [AW00, BKM91, Bli99, B⁺04, BR03, Che08b, Che08a, CM00, CJS92, Coh17, CT06, Cor02, Cor01, Gar01b, Gil79, HSP00, Hau91, Hau95, He17, IN07, Kup07, LZ12, MT02a, Max91, Rad04, Rog64, SHWP09, Sch79, SDST06, TGW89, TK93, Wan99, Wan00, ZRD⁺14, Zin94, AW10, AH75, AS12, Ano97, BCR83, BB14, BB16, Ber93, BS08, BS70, CHH⁺01, CK91, CKM⁺16, DFM17, EDM09, GEK11, Hal92, Hen05, Hig61, HST10, Hoy70, Hsi93b, Hsi93c, Hsi01, JT85, LTÜ00, LZLX10, LJ13, LMX19, Mar11, Min04, Mus97, Mus98, Oes00, RZ12, Sah06, Sch06, Slo84, Sol67, Tan79, Via16, Wea99, XGW13, ZSRB07, ZBT⁺99, ZCT⁺14, Zon13]. **Packings** [AM07, AGM08, AMB11, BW01, BN00, BN05, BH98, BBC98, CE03, CS⁺88, CS95, FS11, Gen04, GORT02, Hal97b, Hal97c, Hal06c, HC16, Mud93, MVG05, PKC16, TS06, TJ09a, Tót99, BK10, BN02, BH00, Bez06, CEG10, Che10, CS⁺93, CS99, DTSC04, DSCT04, DCST07, Fer06, Hal93, Hal97a, Hal01b, Hal06b, Hal06d, Hal12, JST09, JT11, KEG09, KEG10, KGT15, Kun92, KK90, Lag02, Lee64, Lee67a, Lee67b, Lee69, LS71, Lep97, MPS02, PZ06, SST08, Slo81, Szi93, Tho79, Tho83, TS01, TJ09c, TJ09b, TJ10a, TJ10b, TS10a, TS10b, TJ12, VG01, Zau16, ZT99]. **packs** [LRCG16]. **Packungen** [Lep97]. **Pairs** [Gil79]. **Palásti** [AH75, BS70]. **papers** [BR07]. **paquets** [Ber93]. **paradoxes** [Gar01a]. **Parallel** [BKM91]. **parametric** [Sch00]. **Paris** [Hil00, Hil01]. **Park** [SBG04]. **parking** [AW10]. **part** [CAL⁺13, STDH02]. **Particle** [XGW13, TS01, TS10a, TS10b]. **particles** [DTS05a, DTS05b, DCST07, TJ12]. **Partitioning** [CJS92]. **pattern** [AL01]. **patterns** [Ano97, Mus97, Mus98]. **Penrose** [Rad04]. **Pentahedral** [Fer06]. **Perfect** [AW00, AS12]. **perimeter** [CGV⁺03, CF10]. **Periodic** [Zin94, KEG09, KEG10, TJ10b]. **pg** [TJ10a]. **Phase** [HAEG11]. **phases** [HAEK⁺09]. **phenomena** [ZD96]. **Philosophy** [Bra95]. **Phys** [TS10b]. **physical** [HL03]. **Physics** [MT02b, Coh09]. **picturebook** [Che10]. **plane** [BS70, KK90, Tót53, Tót72]. **Planning** [Wan99]. **Platonic** [BK10, JT11, SAF10, TJ09c, TJ09b, TJ10a]. **pokrytije** [Rog68]. **polydisperse** [ZBT⁺99]. **polyhedra** [GJT12, TJ09b]. **polyhedron** [AF06]. **polytopes** [BH00]. **Pontevedra** [BR07]. **Pontyprid** [IEE07]. **practice** [Har08]. **Principia** [Bra95]. **principle** [Hsi01]. **Principles** [Bra95, TJ12]. **prisms** [Fer06]. **Probabilistic** [CJS92]. **Probability** [SE92, Gar01a]. **Probleem** [Str28]. **Problem**

[Che08a, Cor02, Gil79, HS14, SvdW53, AS12, BB16, Bra95, CKM⁺16, Hal92, HL03, Hsi93b, Hsi93c, Mar11, Rén58, Str28, Via16, ZSRB07]. **Probleme** [Hil00, Hil01]. **Problems** [CJS92, Hil00, Hil01, Hil02, IN07, BS08, Cas01, Gar01a, Hil00, Kla19, Szp03a, Wea99]. **procedures** [TS01]. **Proceedings** [MS02, STDH02, Bil85, ACM01, AL01, CAL⁺13, FVJT10, FS07, HY14, SBH07, HM05, SBG04]. **Processing** [dGMMD14]. **programming** [DTSC04]. **Programs** [Hal10, Hal06d, Obu05, ON09]. **Projects** [CAL⁺13]. **Proof** [Hal04, Hal08, BB14, Hal03, Hal05, HHM⁺10, HAB⁺15, Har08, Hen98, Hsi93b, Hsi93c, Lag11b, Lag11a, Szp03b, Mor05]. **proofs** [Edw16, Hal12]. **prove** [Kla19]. **Proving** [Ano99, Obu05, HM05, SBG04]. **Publisher** [TS10b]. **Pursuit** [AW00]. **puzzles** [Gar01a].

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Radical [GORT02]. **Radiosurgical** [Wan99]. **Random** [AW10, AS12, HSP00, Mar85, Sol67, TUS06, Zin94, AH75, BCR83, BK10, BS70, Hig61, JT11, JT85, KGT15, LJ13, LRCG16, Rén58, Tan79]. **range** [JT11]. **ratio** [HST10]. **Raum** [Tót53, Tót72]. **Raumgruppen** [MPS02]. **real** [Obu05]. **Reasoning** [FS07, KU13]. **recreational** [Gar01a]. **reflection** [MPS02]. **regions** [Hal07]. **Regular** [AM07, Che08b, LZ12, CEG10, GEK11, KGT15]. **Regularization** [HS14]. **rejoinder** [Hsi95]. **Related** [CJS92, GJT12]. **Remarks** [Hal93, VG01]. **repeating** [KEG09, KEG10]. **retessellations** [GJT12]. **Rev** [TS10b]. **Review** [Mor05]. **revised** [BR07]. **revision** [HHM⁺10]. **revisited** [Bez06]. **Rigid** [HC16, ZRD⁺14]. **Role** [AM07, TJ09a]. **Rotated** [He17]. **Rule** [Kla19]. **Russian** [Rog68].

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[BKM91, BR03, Har13, GJT12, Kla19, Lee64, MPS02, PZ06, RZ12, Rén58, Sen81, Szi93, Tót53, Tót72, ZCT⁺14]. **spaces** [SDST06]. **spaciousness** [Mát93]. **Spain** [BR07]. **Sphere** [AGM08, AMB11, BW01, BB16, BBC98, Bez06, Bli99, Che08a, CM00, CE03, Coh17, CS⁺88, CS⁺93, CS95, CS99, Cor02, Fer06, Hal97a, Hal97b, Hal97c, HSP00, Hal01b, Hal06b, Hal06c, Hal06d, Hau91, Hau95, He17, Hen05, HC16, Kun92, LS71, MT02a, Max91, Mud93, MVG05, Rad04, TS06, TGW89, Tót99, Wan00, ZT99, AS12, Ano97, BB14, BS08, CHH⁺01, CK91, CKM⁺16, DFM17, DTSC04, EDM09, Hal92, Hal93, Hal12, Hsi93b, Hsi93c, HS14, IN07, KGT15, Lag02, Lee64, Lee67a, Lee67b, Lee69, LTÜ00, LJ13, LMX19, LRCG16, Mát93, MPS02, Mus97, Mus98, Oes00, RZ12, RT98, Sah06, SST08, Slo81, Szi93, Tho79, Tho83, VG01, Via16, ZSRB07, Zau16, ZBT⁺99, Lep97]. **Sphere-Packing** [Cor02, Hen05, Oes00, Sah06]. **Spheres** [AM07, BN00, BN05, BH98, BKM91, BR03, Gen04, GORT02, PKC16, Ste99, Wan99, Zin94, BCR83, BN02, BDH⁺05, Gar01b, Hig61, Hsi93a, Hsi94, JT85, PZ06, SHWP09, Sch06, Slo84, TUS06, vMFC09, Oes00, Hen98, HZ00]. **Spherical** [HST10, Kup07, Slo81]. **Spiegelungsuntergruppen** [MPS02]. **spinodal** [BCR83]. **square** [ZCT⁺14]. **squeeze** [Coh09]. **Stability** [BBC98, LJ13]. **stable** [BK10]. **stack** [Szp03b]. **standard** [NIS14]. **State** [MT02b]. **statistical** [Hig61]. **statistics** [Bil85, RT98]. **status** [Hal94, Hsi95]. **Stephen** [Ste99]. **Stiefel** [Hen05]. **Stochastic** [SBH07]. **storage** [Gro62]. **Strange** [ZD96]. **Strena** [Kep11]. **Strings** [BKM91]. **strong** [Bez13]. **strongly** [Zau16]. **Structural** [AGM08]. **structures** [Ano97, Mus97, Mus98]. **Study** [Mar11, Ano97, Hig61, Mus97, Mus98, vMFC09]. **subgroups** [MPS02]. **Subsets** [Hau95, Hau91]. **superballs** [JST09]. **surface** [AF06, BDH⁺05]. **surfaces** [SHWP09]. **symmetric** [Kla19]. **Symmetry** [TJ09a, THBM07, Wey52, Wey82, Wey89]. **Symposium** [ACM01, Bil85, IEE07, AL01]. **system** [Bal11]. **Systems** [CAL⁺13, Mát93].

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This paper is the second in a series of six papers devoted to the proof of the Kepler conjecture, which asserts that no packing of congruent balls in three dimensions has density greater than the face-centered cubic packing. The top level structure of the proof is described. A compact topological space is described. Each point of this space can be described as a finite cluster of balls with additional combinatorial markings. A continuous function on this compact space is defined. It is proved that the Kepler conjecture will follow if the value of this function is never greater than a given \exp