

Bibliography from ADS file: *spiegel.bib*  
September 14, 2022

- Novi, L., von Hardenberg, J., Hughes, D. W., Provenzale, A., & Spiegel, E. A., "Rapidly rotating Rayleigh-Bénard convection with a tilted axis", 2019EGUGA...21.5155N ADS
- von Hardenberg, J., Goluskin, D., Provenzale, A., & Spiegel, E., "Intermittency and large-scale winds in horizontally anisotropic convection", 2016EGUGA...18.2177V ADS
- von Hardenberg, J., Goluskin, D., Provenzale, A., & Spiegel, E. A., "Generation of Large-Scale Winds in Horizontally Anisotropic Convection", 2015PhRvL...115m4501V ADS
- Spiegel, E., "Rotating relativistic stars", 2015GApFD.109...462S ADS
- Spiegel, E. A., "Uhlenbeck's Complaint", 2014arXiv1411.4934S ADS
- Goluskin, D., Johnston, H., Flierl, G. R., & Spiegel, E. A., "Convectively driven shear and decreased heat flux", 2014JFM...759...360G ADS
- Spiegel, E. A., "The Right Side of Einstein's Equation", 2014arXiv1401.5513S ADS
- Chen, X. & Spiegel, E. A., "Causal relativistic fluid dynamics", 2011CQGra...28q5003C ADS
- Keating, S., Spiegel, E. A., & Worster, M. G., "Patterns of convection in solidifying binary solutions", 2011GApFD.105...304K ADS
- Spiegel, E. A.: 2011, *The Theory of Turbulence*, Vol. 810 2011LNP...810...S ADS
- Bracco, A., Provenzale, A., Spiegel, E. A., & Yecko, P., "Spotted discs", in *Theory of Black Hole Accretion Discs*, 254-273 2010tbha.book...254B ADS
- Spiegel, E. A., "Cosmic vortices in hot stars and cool disks", 2010ThCFD...24...77S ADS
- Gallet, B., Doering, C. R., & Spiegel, E. A., "Destabilizing Taylor-Couette flow with suction", 2010PhFl...22c4105G ADS
- Spiegel, E. A., "Chaos and Intermittency in the Solar Cycle", 2009SSRv...144...25S ADS
- Spiegel, E. A., "Chaos and Intermittency in the Solar Cycle", in M. J. Thompson, A. Balogh, J. L. Culhane, Å. Nordlund, S. K. Solanki, and J. P. Zahn (Eds.), *The Origin and Dynamics of Solar Magnetism*, Vol. 32, 25 2009odsm.book...25S ADS
- Brandenburg, A. & Spiegel, E. A., "Modeling a Maunder minimum", 2008AN...329...351B ADS
- Spiegel, E. A., "Reflections on the solar tachocline", 2007sota.conf...31S ADS
- Spiegel, E. A., "Phenomenological photofluidynamics", 2006EAS...21...127S ADS
- Spiegel, E. A., "Obituary: Kevin H. Prendergast, 1929-2004", 2005BAAS...37.1555S ADS
- Spiegel, E. A. & Thiffeault, J.-L., "Continuum equations for stellar dynamics", in M. J. Thompson and J. Christensen-Dalsgaard (Eds.), *Stellar Astrophysical Fluid Dynamics*, 377-391 2003safd.book...377S ADS
- Thieberger, R. & Spiegel, E. A., "Luminosity effects in projected fractals", 2002BASTI...30...461T ADS
- Paparella, F., Spiegel, E. A., & Talon, S., "Shear and Mixing in Oscillating Doubly Diffusive Convection", 2002GApFD...96...271P ADS
- Chen, X., Spiegel, E. A., & Rao, H., "Continuum description of rarefied gas dynamics. III. The structures of shock waves", 2002PhRvE...65c6304C ADS
- Chen, X., Rao, H., & Spiegel, E. A., "Continuum description of rarefied gas dynamics. II. The propagation of ultrasound", 2001PhRvE...64d6309C ADS
- Chen, X., Rao, H., & Spiegel, E. A., "Continuum description of rarefied gas dynamics. I. Derivation from kinetic theory", 2001PhRvE...64d6308C ADS
- Chen, X. & Spiegel, E. A., "Radiative bulk viscosity", 2001MNRAS.323...865C ADS
- Birch, A. C., Kosovichev, A. G., Spiegel, E. A., & Tao, L., "Resonant Vibrational Instabilities in Magnetized Stellar Atmospheres", 2001SoPh...199...291B ADS
- Chen, X. & Spiegel, E. A., "The Radiative Stress Tensor", 2000ApJ...540.1069C ADS
- Bracco, A., Chavanis, P. H., Provenzale, A., & Spiegel, E. A., "Particle aggregation in a turbulent Keplerian flow", 1999PhFl...11.2280B ADS
- Birch, A. C., Kosovichev, A. G., Spiegel, E. A., & Tao, L., "Instability of Nonadiabatic Oscillations in a Magnetized Polytrope", 1999AAS...194.9307B ADS
- Chen, X. & Spiegel, E. A., "A Resummed Radiative Stress Tensor", 1999AAS...194.3208C ADS
- Spiegel, E. A. & Tao, L., "Photofluid instabilities of hot stellar envelopes", 1999PhR...311...163S ADS
- Spiegel, E. A., "Gravitational Screening", 1999oep.conf...465S ADS
- Umurhan, O. M., Tao, L., & Spiegel, E. A., "Stellar Oscillations", 1998NYASA.867...298U ADS
- Murante, G., Provenzale, A., Spiegel, E. A., & Thieberger, R., "Scaling Regimes in the Distribution of Galaxies", 1998NYASA.867...258M ADS
- Casti, A. R. R., Morrison, P. J., & Spiegel, E. A., "Negative Energy Modes and Gravitational Instability of Interpenetrating Fluids", 1998NYASA.867...93C ADS
- Birch, A. C., Spiegel, E. A., Tao, L., & Kosovichev, A. G., "A Nonlinear Model for Solar Spicules", 1998AAS...19310001B ADS
- Bracco, A., Provenzale, A., Spiegel, E. A., & Yecko, P., "Spotted disks", 1998tbha.conf...254B ADS
- Casti, A., Morrison, P., & Spiegel, E., "Gravitational Instability of Interpenetrating Fluids", 1997AAS...191.8601C ADS
- Umurhan, O. M. & Spiegel, E. A., "Acoustic Overstability of Plane Parallel Polytropes: an Astrophysical Thermoacoustic Engine", 1997AAS...191.1208U ADS
- Murante, G., Provenzale, A., Spiegel, E. A., & Thieberger, R., "Density singularities and cosmic structures", 1997MNRAS.291...585M ADS
- Provenzale, A., Spiegel, E. A., & Thieberger, R., "Cosmic lacunarity", 1997Chaos...7...82P ADS
- Spiegel, E. A., "Catastrophes, chaos and cycles", 1997ppvs.conf...311S ADS
- Graf von Hardenberg, J., Paparella, F., Provenzale, A., & Spiegel, E. A., "Through a Glass Darkly: Distinguishing Chaotic from Stochastic Resonance", 1997NYASA.808...79G ADS
- Balmforth, N. J. & Spiegel, E. A., "Nonlinear ringing of polytropic disks", 1996PhD...97...1B ADS
- Spiegel, E. A. & Zahn, J.-P.: 1996, *Chaotic Dynamics of the Solar Cycle*, Technical Report, Columbia Univ. New York, NY United States 1996cuny.rept...S ADS
- Balmforth, N. J. & Spiegel, E. A.: 1995, *Sinusoidal oscillations and steady WARPS of polytropic disks* 1995STIN...9534216B ADS
- Balmforth, N. J., Howard, L. N., & Spiegel, E. A., "Instability of rapidly rotating polytropes", 1995SJAM...55...298B ADS
- Balmforth, N. J. & Spiegel, E. A., "Sinuous modes and steady warps of polytropic disks", 1995NYASA.773...55B ADS
- Spiegel, E. A., "A prelude to stellar convection theory", in I. W. Roxburgh and J.-L. Masnou (Eds.), *Particle Physics and Astrophysics*, Vol. 458, 129 1995LNP...458...129S ADS
- Qian, Z. S. & Spiegel, E. A., "Autogravity waves in a polytropic layer", 1994GApFD...74...225Q ADS
- Spiegel, E. A., "The Chaotic Solar Cycle", 1994spd.conf...245S ADS
- Spiegel, E. A., "Patterns of Aperiodic Pulsation", 1993Ap&SS.210...33S ADS
- Spiegel, E. A.: 1993b, *Chaotic dynamics of the solar cycle*, Annual Report, 1 Nov. 1992 - 31 Oct. 1993 Columbia Univ., New York, NY. Astrophysics Lab. 1993cuny.reptR...S ADS
- Spiegel, E. A., "Astrophysical fluid dynamics", 1993afd.conf...1S ADS
- Platt, N., Spiegel, E. A., & Tresser, C., "On-off intermittency: A mechanism for bursting", 1993PhRvL...70...279P ADS
- Balmforth, N. J., Cvitanović, P., Ierley, G. R., Spiegel, E. A., & Vattay, G., "Advection of Vector Fields by Chaotic Flows", 1993NYASA.706...148B ADS
- Balmforth, N. J., Howard, L. N., & Spiegel, E. A., "Equilibria of rapidly rotating polytropes", 1993MNRAS.260...253B ADS
- Platt, N., Spiegel, E. A., & Tresser, C., "The intermittent solar cycle", 1993GApFD...73...147P ADS
- Spiegel, E. A.: 1992, *Chaotic dynamics of the solar cycle*, Annual Report, 1 Nov. 1991 - 30 Nov. 1992 Columbia Univ., New York, NY. Astrophysics Lab. 1992cuny.reptR...S ADS
- Spiegel, E. A. & Zahn, J. P., "The solar tachocline", 1992A&A...265...106S ADS
- Abramowicz, M. A., Lanza, A., Spiegel, E. A., & Szuszkiewicz, E., "Vortices on accretion disks", 1992Natur.356...41A ADS
- Abramowicz, M. A., Bao, G., Fiore, F., et al., "A Model for the X-Ray Variability of the Seyfert Galaxy NGC6814", 1992pagn.conf...61A ADS
- Balmforth, N. J., Meacham, S. P., Spiegel, E. A., & Young, W. R., "Global equilibria of turbulent accretion disks", 1992NYASA.675...53B ADS
- Spiegel, E. A. & Zahn, J. P., "The Turbulent Tachycline", 1992ASPC...26...188S ADS
- Elphick, C., Regev, O., & Spiegel, E. A., "Complexity from thermal instability", 1991MNRAS.250...617E ADS
- Proctor, M. R. E. & Spiegel, E. A., "Waves of Solar Activity", in I. Tuominen, D. Moss, and G. Rüdiger (Eds.), *IAU Colloq. 130: The Sun and Cool Stars. Activity, Magnetism, Dynamos*, Vol. 380, 117 1991LNP...380...117P ADS
- Ghosal, S. & Spiegel, E. A., "On thermonuclear convection: I shellular instability", 1991GApFD...61...161G ADS
- Dowling, T. E. & Spiegel, E. A., "Stellar and Jovian vortices", 1990NYASA.617...190D ADS
- Spiegel, E. A., "Chaos: A Mixed Metaphor for Turbulence", 1987RSPSA.413...87S ADS

- Smith, L. A. & Spiegel, E. A., "Strange Accumulators", 1987NYASA.497...61S ADS
- Spiegel, E. A. & Wolf, A., "Chaos and the Solar Cycle", 1987NYASA.497...55S ADS
- Buchler, J. R., Perdang, J. M., Spiegel, E. A., & Tavakol, R., "Book-Review - Chaos in Astrophysics", 1987Obs...107...89B ADS
- Smith, L. A. & Spiegel, E. A., "Strange Accumulators", 1987cpa...work...61S ADS
- Spiegel, E. A. & Wolf, A., "Chaos and the Solar Cycle", 1987cpa...work...55S ADS
- Buchler, J. R., Perdang, J. M., & Spiegel, E. A., "Book-Review - Chaos in Astrophysics", 1987ApL...25S.266B ADS
- Spiegel, E. A., "Hydrostatic Adjustment Time of the Solar Subconvective Layer", 1987ASSL...137...321S ADS
- Buchler, J. R., Perdang, J. M., & Spiegel, E. A., "Book-Review - Chaos in Astrophysics", 1986Sci...232.1045B ADS
- Spiegel, E. A., "Cosmic arrhythmias.", 1985chas.conf...91S ADS
- , "Chaos in astrophysics. Proceedings of a NATO Advanced Research Workshop, held at Palm Coast, Florida, USA, 9 - 11 April 1984.", 1985chas.conf...B ADS
- Buchler, J. R., Perdang, J. M., & Spiegel, E. A.: 1985, *Chaos in astrophysics. Proceedings of a NATO Advanced Research Workshop, held at Palm Coast, Florida, USA, 9 - 11 April 1984*, Vol. 161 1985capn.book...B ADS
- Arneodo, A., Coulet, P. H., & Spiegel, E. A., "The dynamics of triple convection", 1985GApFD...31...1A ADS
- Spiegel, E. A., "Cosmic arrhythmias", 1985ASIC...161...91S ADS
- , "Chaos in astrophysics", 1985ASIC...161...B ADS
- Toomre, J., Gough, D. O., & Spiegel, E. A., "Time-dependent solutions of multimode convection equations", 1982JFM...125...99T ADS
- Spiegel, E. A. & Weiss, N. O., "Magnetic buoyancy and the Boussinesq approximation", 1982GApFD...22...219S ADS
- Depassier, M. C. & Spiegel, E. A., "Convection with heat flux prescribed on the boundaries of the system. I. The effect of temperature dependence of material properties", 1982GApFD...21...167D ADS
- Childress, S. & Spiegel, E. A., "A prospectus for a theory of variable variability", 1981NASCP2191...273C ADS
- Depassier, M. C. & Spiegel, E. A., "The large-scale structure of compressible convection", 1981AJ...86...496D ADS
- Spiegel, E. A. & Weiss, N. O., "Magnetic activity and variations in solar luminosity", 1980Natur...287...616S ADS
- Poyet, J. P. & Spiegel, E. A., "The onset of convection in a radially pulsating star", 1979AJ...84.1918P ADS
- Huppert, H. E. & Spiegel, E. A., "Penetration of the molecular-weight barrier.", 1977ApJ...213...157H ADS
- Theys, J. C. & Spiegel, E. A., "Ring galaxies. II.", 1977ApJ...212...616T ADS
- Hsieh, S. H. & Spiegel, E. A., "Erratum: the Equations of Photohydrodynamics", 1977ApJ...212...593H ADS
- Spiegel, E. A., "Photoconvection", in E. A. Spiegel and J. P. Zahn (Eds.), *Problems of Stellar Convection*, Vol. 71, 267-283 1977LNP...71...267S ADS
- Gough, D. O. & Spiegel, E. A., "On taking mixing-length theory seriously", in E. A. Spiegel and J. P. Zahn (Eds.), *Problems of Stellar Convection*, Vol. 71, 57-62 1977LNP...71...57G ADS
- Spiegel, E. A. & Zahn, J. P.: 1977, *Problems of stellar convection*, Vol. 71 1977LNP...71...S ADS
- Toomre, J., Gough, D. O., & Spiegel, E. A., "Numerical solutions of single-mode convection equations", 1977JFM...79...1T ADS
- Gough, D. O., Pringle, J. E., & Spiegel, E. A., "Seiches in supergranules", 1976Natur...264...424G ADS
- Theys, J. C. & Spiegel, E. A., "Ring galaxies. I.", 1976ApJ...208...650T ADS
- Toomre, J., Zahn, J. P., Latour, J., & Spiegel, E. A., "Stellar convection theory. II. Single-mode study of the second convection zone in an A-type star.", 1976ApJ...207...545T ADS
- Hsieh, S. H. & Spiegel, E. A., "The equations of photohydrodynamics.", 1976ApJ...207...244H ADS
- Latour, J., Spiegel, E. A., Toomre, J., & Zahn, J. P., "Stellar convection theory. I. The anelastic modal equations.", 1976ApJ...207...233L ADS
- Gough, D. O., Moore, D. R., Spiegel, E. A., & Weiss, N. O., "Convective Instability in a Compressible Atmosphere. II", 1976ApJ...206...536G ADS
- Spiegel, E. A., "Photohydrodynamic instabilities of hot stellar atmospheres", 1976pmas.conf...19S ADS
- Anderson, J. L. & Spiegel, E. A., "Radiative transfer through a flowing refractive medium.", 1975ApJ...202...454A ADS
- Baker, L. & Spiegel, E. A., "Modal analysis of convection in a rotating fluid", 1975JAtS...32.1909B ADS
- Latour, J., Spiegel, E. A., Toomre, J., & Zahn, J. P., "The Second Convection Zone in an A-type Star", 1975BAAS...7...526L ADS
- Gough, D. O., Spiegel, E. A., & Toomre, J., "Modal equations for cellular convection", 1975JFM...68...695G ADS
- Gough, D. O., Spiegel, E. A., & Toomre, J., "Highly stretched meshes as functionals of solutions", in R. D. Richtmyer (Ed.), *Numerical Methods in Fluid Dynamics*, Vol. 35, 191-196 1975LNP...35...191G ADS
- Prendergast, K. H. & Spiegel, E. A., "Photon Bubbles", 1973CoASP...5...43P ADS
- Theys, J. C., Spiegel, E. A., & Toomre, J., "Radial Velocities in the Tail of NGC 4676A", 1972PASP...84...851T ADS
- Murphy, J. O., Spiegel, E. A., & Van Der Borgh, R., "Effect of a Magnetic Field on Finite Amplitude Convection", 1972PASA...2...93M ADS
- Theys, J. C., Spiegel, E. A., & Toomre, J., "Spectra of Extragalactic Rings.", 1972BAAS...4...213T ADS
- Spiegel, E. A., "Transport Mechanisms in Stars", 1972stev.conf...493S ADS
- Spiegel, E., "Some Fluid Dynamical Problems in Cosmogony", 1972oss.conf...165S ADS
- Spiegel, E. A., "A History of Solar Rotation", in NASA Special Publication, Vol. 300, 61 1972NASSP.300...61S ADS
- Anderson, J. L. & Spiegel, E. A., "The Moment Method in Relativistic Radiative Transfer", 1972ApJ...171...127A ADS
- Spiegel, E. A., "Convection in Stars. II. Special Effects", 1972ARA&A...10...261S ADS
- Ruderman, M. A. & Spiegel, E. A., "Galactic Wakes", 1971ApJ...165...1R ADS
- Švestka, Z., Spiegel, E. A., & van Herk, G., "Book reviews", 1971SSRv...11...867S ADS
- Spiegel, E. A., "Turbulence in Stellar Convection Zones", 1971CoASP...3...53S ADS
- Baker, N. H., Moore, D. W., & Spiegel, E. A., "Aperiodic behaviour of a nonlinear oscillator", 1971QJMAM...24...391B ADS
- Ingersoll, A. P. & Spiegel, E. A., "Temperature Variation and the Solar Oblateness", 1971ApJ...163...375I ADS
- Spiegel, E. A., "Convection in Stars: I. Basic Boussinesq Convection", 1971ARA&A...9...323S ADS
- Spiegel, E. A. & Zahn, J. P., "Instabilities of Differential Rotation", 1970CoASP...2...178S ADS
- Spiegel, E. A., "A History of Solar Rotation", 1970pss.conf...63S ADS
- Schucking, E. L. & Spiegel, E. A., "Thermodynamics and Cosmology", 1970CoASP...2...121S ADS
- Spiegel, E. A., Szekely, E. G., Moffet, H., & Egyed, J., "Cortical Projection of Labyrinthine Impulses: Study of Averaged Evoked Responses", in NASA Special Publication, Vol. 187, 259 1970NASSP.187...259S ADS
- Spiegel, E. A., "The Gas Dynamics of Accretion", 1970IAUS...39...201S ADS
- Spiegel, E. A., "On the Circulation of Gas Near the Galactic Center", 1970IAUS...38...441S ADS
- Murray, J. D., Spiegel, E. A., & Theys, J., "Fluidization on the Moon (?)", 1969CoASP...1...165M ADS
- Spiegel, E. A., "Semiconvection", 1969CoASP...1...57S ADS
- Moore, D. W. & Spiegel, E. A., "On the Flow of Gas from the Galactic Center", 1968ApJ...154...863M ADS
- Spiegel, E. A., "The Mixing of Lithium", 1968HiA...1...261S ADS
- Souffrin, P. & Spiegel, E. A., "An overstability of gravity waves", 1967AnAp...30...985S ADS
- Spiegel, E. A., "The Solar Atmospheric Convection Zone - The Theory of Turbulent Convection", 1967IAUS...28...347S ADS
- Stein, R. F. & Spiegel, E. A., "Radiative damping of sound waves.", 1967ASAJ...42...866S ADS
- Moore, D. W. & Spiegel, E. A., "A Thermally Excited Non-Linear Oscillator", 1966ApJ...143...871M ADS
- Spiegel, E. A., "Energy Transport by Turbulent Convection", 1966stev.conf...143S ADS
- Unno, W. & Spiegel, E. A., "The Eddington Approximation in the Radiative Heat Equation", 1966PASJ...18...85U ADS
- Spiegel, E. A., "The Solar Hydrogen Convection Zone and its Direct Influence on the Photosphere", 1966IAUTB...12...539S ADS
- Baker, N. H., Moore, D. W., & Spiegel, E. A., "Nonlinear oscillations in the one-zone model for stellar pulsation", 1966AJ...71S.844B ADS
- Spiegel, E. A., "Convective Instability in a Compressible Atmosphere. I.", 1965ApJ...141.1068S ADS
- Moore, D. W. & Spiegel, E. A., "On Convective Overstability.", 1965AJ...70S.327M ADS
- Spiegel, E. A., "The Effect of Radiative Transfer on Convective Growth Rates.", 1964ApJ...139...959S ADS
- Moore, D. W. & Spiegel, E. A., "The Generation and Propagation of Waves in a Compressible Atmosphere.", 1964ApJ...139...48M ADS
- Spiegel, E. A., "A Generalization of the Mixing-Length Theory of Turbulent Convection.", 1963ApJ...138...216S ADS

Spiegel, E. A., “*Thermal Turbulence at Very Small Prandtl Number*”, 1962JGR...67.3063S [ADS](#)

Spiegel, E. A. & Unno, W., “*On Convective Growth-rates in a Polytopic Atmosphere*”, 1962PASJ...14...28S [ADS](#)

Ledoux, P., Schwarzschild, M., & Spiegel, E. A., “*On the Spectrum of Turbulent Convection.*”, 1961ApJ...133..184L [ADS](#)

Spiegel, E. A., “*The Convective Instability of a Radiating Fluid Layer.*”, 1960ApJ...132..716S [ADS](#)

Spiegel, E. A., “*On The Trumpler Shift in Early Stars.*”, 1960AJ.....65..353S [ADS](#)

Spiegel, E. A. & Veronis, G., “*On the Boussinesq Approximation for a Compressible Fluid.*”, 1960ApJ...131..442S [ADS](#)

Spiegel, E., “*The Princeton balloon observations*”, 1960IAUS...12..319S [ADS](#)

Spiegel, E. A.: 1959, “*The Onset of Thermal Convection in a Radiating Atmosphere.*”, *Ph.D. thesis*, University of Michigan 1959PhDT.....2S [ADS](#)

Spiegel, E. A., “*The Smoothing of Temperature Fluctuations by Radiative Transfer.*”, 1957ApJ...126..202S [ADS](#)

Spiegel, E. A., “*Problems of radiative hydrodynamics.*”, 1957AJ.....62R.146S [ADS](#)

Spiegel, E. A. & Aller, L. H., “*Turbulence in the atmosphere of 31 Cygni.*”, 1953AJ.....58Q.229S [ADS](#)