

Bibliography from ADS file: kumar.bib
 September 14, 2022

- Kumar, P., Gill, R., & Lu, W., “Propagation of Alfvén waves in the charge starvation regime”, 2022MNRAS.tmp..2283K [ADS](#)
- Qu, Y., Kumar, P., & Zhang, B., “Transparency of fast radio burst waves in magnetar magnetospheres”, 2022MNRAS.515.2020Q [ADS](#)
- Kumar, P., Gill, R., & Lu, W., “Propagation of Alfvén waves in the charge starvation regime”, 2022arXiv220812806K [ADS](#)
- Kumar, P. & Beniamini, P., “Gravitational lensing in the presence of plasma scattering with application to Fast Radio Bursts”, 2022arXiv220803332K [ADS](#)
- Kumar, P., Biswas, A., & Karak, B. B., “Physical link of the polar field buildup with the Waldmeier effect broadens the scope of early solar cycle prediction: Cycle 25 is likely to be slightly stronger than Cycle 24”, 2022MNRAS.513L.112K [ADS](#)
- De Colle, F., Kumar, P., & Hoeflich, P., “The large landscape of supernova, GRB, and cocoon interactions”, 2022MNRAS.512.3627D [ADS](#)
- Beniamini, P., Kumar, P., & Narayan, R., “Faraday depolarization and induced circular polarization by multipath propagation with application to FRBs”, 2022MNRAS.510.4654B [ADS](#)
- Lu, W., Beniamini, P., & Kumar, P., “Implications of a rapidly varying FRB in a globular cluster of M81”, 2022MNRAS.510.1867L [ADS](#)
- Mordvinov, A. V., Karak, B. B., Banerjee, D., et al., “Evolution of the Sun’s activity and the poleward transport of remnant magnetic flux in Cycles 21–24”, 2022MNRAS.510.1331M [ADS](#)
- Brewer, J., Campbell, M. F., Kumar, P., et al., “Multiscale Photonic Emissivity Engineering for Relativistic Lightsail Thermal Regulation”, 2022NanoL..22..594B [ADS](#)
- Bhattacharya, M. & Kumar, P., “On explaining prompt emission from GRB central engines with photospheric emission model”, 2021arXiv211014792B [ADS](#)
- Bhattacharya, M., Kumar, P., & Linder, E. V., “Fast radio burst dispersion measure distribution as a probe of helium reionization”, 2021PhRvD.103j3526B [ADS](#)
- Kumar, P., Karak, B. B., & Vashishth, V., “Supercriticality of the Dynamo Limits the Memory of the Polar Field to One Cycle”, 2021ApJ...913...65K [ADS](#)
- Beniamini, P., Kumar, P., Ma, X., & Quataert, E., “Exploring the epoch of hydrogen reionization using FRBs”, 2021MNRAS.502.5134B [ADS](#)
- Kumar, P., Nagy, M., Lemerle, A., Karak, B. B., & Petrovay, K., “The Polar Precursor Method for Solar Cycle Prediction: Comparison of Predictors and Their Temporal Range”, 2021ApJ...909...87K [ADS](#)
- Bustamante Rosell, M. J., Wheeler, C., Gebhardt, K., et al., “The LIGO HET Response (LIGHETR) Project to Discover and Spectroscopically Follow Optical Transients Associated with Neutron Star Mergers”, 2021APS..APR09006B [ADS](#)
- Lu, W., Kumar, P., & Zhang, B., “A unified picture of Galactic and cosmological fast radio bursts”, 2020MNRAS.498.1397L [ADS](#)
- Beniamini, P. & Kumar, P., “What does FRB light-curve variability tell us about the emission mechanism?”, 2020MNRAS.498..651B [ADS](#)
- Bhattacharya, M. & Kumar, P., “Population Modeling of Fast Radio Bursts from Source Properties”, 2020ApJ...899..124B [ADS](#)
- Kumar, P. & Bošnjak, Ž., “FRB coherent emission from decay of Alfvén waves”, 2020MNRAS.494.2385K [ADS](#)
- Kumar, P. & Lu, W., “Radiation forces constrain the FRB mechanism”, 2020MNRAS.494.1217K [ADS](#)
- Bhattacharya, M. & Kumar, P., “Explaining GRB prompt emission with sub-photospheric dissipation and Comptonization”, 2020MNRAS.491.4656B [ADS](#)
- Gill, R., Granot, J., & Kumar, P., “Linear polarization in gamma-ray burst prompt emission”, 2020MNRAS.491.3343G [ADS](#)
- Kumar, P. & Linder, E. V., “Use of fast radio burst dispersion measures as distance measures”, 2019PhRvD.100h3533K [ADS](#)
- Grossan, B., Kumar, P., & Smoot, G. F., “The emission mechanism of gamma-ray bursts: Identification via optical-IR slope measurements”, 2019JHEAp..23...14G [ADS](#)
- Bhattacharya, M., Kumar, P., & Smoot, G., “Mergers of black hole-neutron star binaries and rates of associated electromagnetic counterparts”, 2019MNRAS.486.5289B [ADS](#)
- Grossan, B., Kumar, P., Hurley, K., & Zhang, B., “Measurement of the Optical-IR Spectral Shape of Prompt Gamma-Ray Burst Emission: A Timely Call to Action for Gamma-Ray Burst Science”, 2019BAAS...51c..47G [ADS](#)
- Timmes, F., Fryer, C., Timmes, F., et al., “Catching Element Formation In The Act ; The Case for a New MeV Gamma-Ray Mission: Radionuclide Astronomy in the 2020s”, 2019BAAS...51c...2T [ADS](#)
- Lu, W. & Kumar, P., “The maximum luminosity of fast radio bursts”, 2019MNRAS.483L..93L [ADS](#)
- Lu, W., Kumar, P., & Narayan, R., “Fast radio burst source properties from polarization measurements”, 2019MNRAS.483..359L [ADS](#)
- Lu, W. & Kumar, P., “On the Missing Energy Puzzle of Tidal Disruption Events”, 2018ApJ...865..128L [ADS](#)
- De Colle, F., Lu, W., Kumar, P., Ramirez-Ruiz, E., & Smoot, G., “Thermal and non-thermal emission from the cocoon of a gamma-ray burst jet”, 2018MNRAS.478.4553D [ADS](#)
- De Colle, F., Kumar, P., & Aguilera-Dena, D. R., “Radio Emission from the Cocoon of a GRB Jet: Implications for Relativistic Supernovae and Off-axis GRB Emission”, 2018ApJ...863...32D [ADS](#)
- Carballo-Rubio, R., Kumar, P., & Lu, W., “Seeking observational evidence for the formation of trapping horizons in astrophysical black holes”, 2018PhRvD..97l3012C [ADS](#)
- Lu, W. & Kumar, P., “On the radiation mechanism of repeating fast radio bursts”, 2018MNRAS.477.2470L [ADS](#)
- Pooley, D., Kumar, P., Wheeler, J. C., & Grossan, B., “GW170817 Most Likely Made a Black Hole”, 2018ApJ...859L..23P [ADS](#)
- Bhattacharya, M., Lu, W., Kumar, P., & Santana, R., “Monte Carlo Simulations of Photospheric Emission in Relativistic Outflows”, 2018ApJ...852...24B [ADS](#)
- Lu, W., Krolik, J., Crumley, P., & Kumar, P., “Radiative interaction between the relativistic jet and optically thick envelope in tidal disruption events”, 2017MNRAS.471.1141L [ADS](#)
- Kumar, P., Lu, W., & Bhattacharya, M., “Fast radio burst source properties and curvature radiation model”, 2017MNRAS.468.2726K [ADS](#)
- Lu, W., Kumar, P., & Narayan, R., “Stellar disruption events support the existence of the black hole event horizon”, 2017MNRAS.468..910L [ADS](#)
- Lu, W. & Kumar, P., “A universal EDF for repeating fast radio bursts?”, 2016MNRAS.461L.122L [ADS](#)
- Rani, M., Kumar, P., & Vandana, V., “India’s mission to Mars cost less than the movie Gravity: Multidimensional View in Engineering Education”, 2016cosp...41E1623R [ADS](#)
- Kumar, P., Katiyar, S., & Rani, M., “Adverse Impact of Electromagnetic Radiation on Urban Environment and Natural Resources using Optical Sensors”, 2016cosp...41E1084K [ADS](#)
- Katiyar, S. & Kumar, P., “Dynamic Impact of Fluoride Dust on Industrial Workers in Thermal Power Plant and its Feasibility Study on Troposphere”, 2016cosp...41E.955K [ADS](#)
- Ceccobello, C. & Kumar, P., “Erratum: Inverse-Compton drag on a highly magnetized GRB jet in stellar envelope”, 2016MNRAS.458.1374C [ADS](#)
- Lu, W. & Kumar, P., “External inverse-Compton emission from jetted tidal disruption events”, 2016MNRAS.458.1071L [ADS](#)
- Lu, W., Kumar, P., & Evans, N. J., “Infrared emission from tidal disruption events - probing the pc-scale dust content around galactic nuclei”, 2016MNRAS.458..575L [ADS](#)
- Beniamini, P. & Kumar, P., “X-ray flares in GRBs: general considerations and photospheric origin”, 2016MNRAS.457L.108B [ADS](#)
- Santana, R., Crumley, P., Hernández, R. A., & Kumar, P., “Monte Carlo simulations of the photospheric process”, 2016MNRAS.456.1049S [ADS](#)
- Lu, W., Kumar, P., & Smoot, G. F., “Probing massive stars around gamma-ray burst progenitors”, 2015MNRAS.453.1458L [ADS](#)
- Wang, X.-G., Zhang, B., Liang, E.-W., et al., “How Bad or Good Are the External Forward Shock Afterglow Models of Gamma-Ray Bursts?”, 2015ApJS..219...9W [ADS](#)
- Ceccobello, C. & Kumar, P., “Inverse-Compton drag on a highly magnetized GRB jet in stellar envelope”, 2015MNRAS.449.2566C [ADS](#)
- Rezzolla, L. & Kumar, P., “A Novel Paradigm for Short Gamma-Ray Bursts With Extended X-Ray Emission”, 2015ApJ...802...95R [ADS](#)
- Kumar, P. & Zhang, B., “The physics of gamma-ray bursts & relativistic jets”, 2015PhR...561....1K [ADS](#)
- Kumar, P. & Smoot, G. F., “Some implications of inverse-Compton scattering of hot cocoon radiation by relativistic jets in gamma-ray bursts”, 2014MNRAS.445..528K [ADS](#)
- Santana, R., Barniol Duran, R., & Kumar, P., “Magnetic Fields in Relativistic Collisionless Shocks”, 2014ApJ...785...29S [ADS](#)
- Crumley, P. & Kumar, P., “Radio Emission from the Bow Shock of G2”, 2013arXiv1312.3901C [ADS](#)
- Zhang, B. & Kumar, P., “Model-Dependent High-Energy Neutrino Flux from Gamma-Ray Bursts”, 2013PhRvL.110l1110Z [ADS](#)
- Lindner, C. C., Milosavljević, M., Shen, R., & Kumar, P., “Simulations of Accretion Powered Supernovae in the Progenitors of Gamma-Ray Bursts”, 2012ApJ...750..163L [ADS](#)
- Milosavljević, M., Lindner, C. C., Shen, R., & Kumar, P., “Supernovae Powered by Collapsar Accretion in Gamma-Ray Burst Sources”, 2012ApJ...744..103M [ADS](#)
- Shen, R., Kumar, P., & Piran, T., “Erratum: The late jet in gamma-ray bursts and its interactions with a supernova ejecta and a cocoon”, 2011MNRAS.418.2106S [ADS](#)

- Narayan, R., Kumar, P., & Tchekhovskoy, A., “*Constraints on cold magnetized shocks in gamma-ray bursts*”, 2011MNRAS.416.2193N ADS
- Höflich, P., Kumar, P., & Wheeler, J. C.: 2011, *Cosmic Explosions in Three Dimensions* 2011cetd.book.....H ADS
- Kumar, P. & Johnson, J. L., “*Supernovae-induced accretion and star formation in the inner kiloparsec of a gaseous disc*”, 2010MNRAS.404.2170K ADS
- Lindner, C. C., Milosavljević, M., Couch, S. M., & Kumar, P., “*Collapsar Accretion and the Gamma-Ray Burst X-Ray Light Curve*”, 2010ApJ...713..800L ADS
- Shen, R., Kumar, P., & Piran, T., “*The late jet in gamma-ray bursts and its interactions with a supernova ejecta and a cocoon*”, 2010MNRAS.403..229S ADS
- Kumar, P. & Narayan, R., “GRB 080319B: evidence for relativistic turbulence, not internal shocks”, 2009MNRAS.395..472K ADS
- Narayan, R. & Kumar, P., “*A turbulent model of gamma-ray burst variability*”, 2009MNRAS.394L.117N ADS
- Kumar, P., Narayan, R., & Johnson, J. L., “*Mass fall-back and accretion in the central engine of gamma-ray bursts*”, 2008MNRAS.388.1729K ADS
- Kumar, P., Narayan, R., & Johnson, J. L., “*Properties of Gamma-Ray Burst Progenitor Stars*”, 2008Sci...321..376K ADS
- Kumar, P. & McMahon, E., “*A general scheme for modelling γ -ray burst prompt emission*”, 2008MNRAS.384..33K ADS
- Roming, P. W. A., Vanden Berk, D., Pal'shin, V., et al., “*GRB 060313: A New Paradigm for Short-Hard Bursts?*”, 2006ApJ...651..985R ADS
- Shen, R., Kumar, P., & Robinson, E. L., “*No universality for the electron power-law index (p) in gamma-ray bursts and other relativistic sources*”, 2006MNRAS.371.1441S ADS
- Kumar, P., “*GRB Environment Deduced from Afterglow Emission*”, 2006sgrb.confE..34K ADS
- Granot, J. & Kumar, P., “*Distribution of gamma-ray burst ejecta energy with Lorentz factor*”, 2006MNRAS.366L..13G ADS
- Kumar, P., “*The Enigmatic Gamma-Ray Bursts: A Mystery Being Solved*”, 2004tsra.conf...32K ADS
- , “*Cosmic explosions in three dimensions : asymmetries in supernovae and gamma-ray bursts*”, 2004cetd.conf.....H ADS
- Kumar, P. & Panaiteescu, A., “*A unified treatment of the gamma-ray burst 021211 and its afterglow*”, 2003MNRAS.346..905K ADS
- Granot, J. & Kumar, P., “*Constraining the Structure of Gamma-Ray Burst Jets through the Afterglow Light Curves*”, 2003ApJ...591.1086G ADS
- Kumar, P. & Granot, J., “*The Evolution of a Structured Relativistic Jet and Gamma-Ray Burst Afterglow Light Curves*”, 2003ApJ...591.1075K ADS
- Kumar, P. & Narayan, R., “*X-Ray Lines from Gamma-Ray Bursts*”, 2003ApJ...584..895K ADS
- Talon, S., Kumar, P., & Zahn, J.-P., “*Angular Momentum Extraction by Gravity Waves in the Sun*”, 2002ApJ...574L.175T ADS
- Granot, J., Panaiteescu, A., Kumar, P., & Woosley, S. E., “*Off-Axis Afterglow Emission from Jetted Gamma-Ray Bursts*”, 2002ApJ...570L..61G ADS
- Alexander, T. & Kumar, P., “*Erratum: “Tidal Spin-up of Stars in Dense Stellar Cusps around Massive Black Holes”* (ApJ, 549, 948 [2001]), 2002ApJ...564.1061A ADS
- Piran, T., Kumar, P., Panaiteescu, A., & Piro, L., “*The Energy Distribution of Long Duration GRBS*”, 2001astro.ph..8033P ADS
- Narayan, R., Piran, T., & Kumar, P., “*Accretion Models of Gamma-Ray Bursts*”, 2001ApJ...557..949N ADS
- Alexander, T. & Kumar, P., “*Tidal Spin-up of Stars in Dense Stellar Cusps around Massive Black Holes*”, 2001ApJ...549..948A ADS
- Kumar, P. & Basu, S., “*Source Depth for Solar P-Modes*”, 2000ApJ...545L..65K ADS
- Kumar, P. & Panaiteescu, A., “*Afterglow Emission from Naked Gamma-Ray Bursts*”, 2000ApJ...541L..51K ADS
- Kumar, P. & Panaiteescu, A., “*Steepening of Afterglow Decay for Jets Interacting with Stratified Media*”, 2000ApJ...541L..9K ADS
- Piran, T. & Kumar, P., “*The patchy shells model*”, 2000AIPC..526..535P ADS
- Kumar, P., “*The Distribution of Burst Energy and Shock Parameters for Gamma-Ray Bursts*”, 2000ApJ...538L.125K ADS
- Kumar, P. & Piran, T., “*Energetics and Luminosity Function of Gamma-Ray Bursts*”, 2000ApJ...535..152K ADS
- Kumar, P. & Piran, T., “*Some Observational Consequences of Gamma-Ray Burst Shock Models*”, 2000ApJ...532..286K ADS
- Kumar, P., “*Gamma-Ray Burst Energetics*”, 1999ApJ...523L.113K ADS
- Kumar, P., Talon, S., & Zahn, J.-P., “*Angular Momentum Redistribution by Waves in the Sun*”, 1999ApJ...520..859K ADS
- Kumar, P., “*The Structure of the Central Disk of NGC 1068: A Clumpy Disk Model*”, 1999ApJ...519..599K ADS
- Kumar, P. & Basu, S., “*Line Asymmetry of Solar p-Modes: Properties of Acoustic Sources*”, 1999ApJ...519..396K ADS
- Kumar, P. & Basu, S., “*Line Asymmetry of Solar p-Modes: Reversal of Asymmetry in Intensity Power Spectra*”, 1999ApJ...519..389K ADS
- Talon, S. & Kumar, P., “*Dissipation of a Tide in a Differentially Rotating Star*”, 1998ApJ...503..387T ADS
- Kumar, P. & Quataert, E. J., “*On the Orbital Decay of the PSR J0045-7319 Binary*”, 1998ApJ...493..412K ADS
- Kumar, P. & Riffert, H., “*Possible explanations for some unusually large velocity dispersion molecular clouds near the Galactic Centre*”, 1997MNRAS.292..871K ADS
- Bahcall, J. N., Basu, S., & Kumar, P., “*Localized Helioseismic Constraints on Solar Structure*”, 1997ApJ...485L..91B ADS
- Kumar, P., “*Gas accretion in a clumpy disk with application to AGNs*”, 1997astro.ph..6063K ADS
- Kumar, P. & Quataert, E. J., “*Differential Rotation Enhanced Dissipation of Tides in the PSR J0045-7319 Binary*”, 1997ApJ...479L..51K ADS
- Kumar, P. & Quataert, E. J., “*Angular Momentum Transport by Gravity Waves and Its Effect on the Rotation of the Solar Interior*”, 1997ApJ...475L.143K ADS
- Kumar, P. & Quataert, E. J., “*On the orbital decay of the PSR J0045-7319 Binary*”, 1996astro.ph.12189K ADS
- Abrams, D. & Kumar, P., “*Asymmetries of Solar p-Mode Line Profiles*”, 1996ApJ...472..882A ADS
- Kumar, P. & Abrams, D., “*Asymmetries of Solar p-mode Line Profiles*”, 1996astro.ph.10254K ADS
- Kumar, P. & Goodman, J., “*Nonlinear Damping of Oscillations in Tidal-Capture Binaries*”, 1996ApJ...466..946K ADS
- Quataert, E. J., Kumar, P., & Ao, C. O., “*On the Validity of the Classical Apsidal Motion Formula for Tidal Distortion*”, 1996ApJ...463..284Q ADS
- Kumar, P., Quataert, E. J., & Bahcall, J. N., “*Observational Searches for Solar g-Modes: Some Theoretical Considerations*”, 1996ApJ...458L..83K ADS
- Abrams, D. & Kumar, P., “*Asymmetries of Solar p-mode Line Profiles*”, 1995AAS...18710102A ADS
- Quataert, E., Kumar, P., & Ao, C. O., “*On the Validity of the Classical Apsidal Motion Formula for Tidal Distortion*”, 1995AAS...187.4319Q ADS
- Kumar, P., Narayan, R., & Loeb, A., “*On the Interaction of Convection and Rotation in Stars*”, 1995ApJ...453..480K ADS
- Kumar, P., Ao, C. O., & Quataert, E. J., “*Tidal Excitation of Modes in Binary Systems with Applications to Binary Pulsars*”, 1995ApJ...449..294K ADS
- Narayan, R., Loeb, A., & Kumar, P., “*Causality in Strong Shear Flows*”, 1994ApJ...431..359N ADS
- Kumar, P., “*Properties of Acoustic Sources in the Sun*”, 1994ApJ...428..827K ADS
- Kumar, P., Goldreich, P., & Kerswell, R., “*Effect of Nonlinear Interactions on p-Mode Frequencies and Line Widths*”, 1994ApJ...427..483K ADS
- Goldreich, P., Murray, N., & Kumar, P., “*Excitation of Solar p-Modes*”, 1994ApJ...424..466G ADS
- Bahcall, J. N. & Kumar, P., “*G-Modes and the Solar Neutrino Problem*”, 1993ApJ...409L..73B ADS
- Kumar, P. & Lu, E., “*The Location of the Source of High-Frequency Solar Acoustic Oscillations*”, 1991ApJ...375L..35K ADS
- Goldreich, P. & Kumar, P., “*Thermal and Mechanical Damping of Solar p-Modes*”, 1991ApJ...374..366G ADS
- Goldreich, P., Murray, N., Willette, G., & Kumar, P., “*Implications of Solar p-Mode Frequency Shifts*”, 1991ApJ...370..752G ADS
- Cox, A. N., Chitre, S. M., Frandsen, S., & Kumar, P., “*Oscillation mode excitation*”, in Solar Interior and Atmosphere, 618–660 1991sia..book..618C ADS
- Lu, E. & Kumar, P., “*High Frequency Peaks in the Solar Oscillation Spectrum and the Determination of the Acoustic Source Depth*”, 1991BAAS...23..821L ADS
- Goldreich, P. & Kumar, P., “*Wave Generation by Turbulent Convection*”, 1990ApJ...363..694G ADS
- Kumar, P. & Goldreich, P., “*Nonlinear Interactions among Solar Acoustic Modes*”, 1989ApJ...342..558K ADS
- Kumar, P., Franklin, J., & Goldreich, P., “*Distribution Functions for the Time-averaged Energies of Stochastically Excited Solar p-Modes*”, 1988ApJ...328..879K ADS
- Goldreich, P. & Kumar, P., “*The Interaction of Acoustic Radiation with Turbulence*”, 1988ApJ...326..462G ADS
- Kumar, P.: 1988, “*Excitation and Damping of Solar P-Modes*”, Ph.D. thesis, California Institute of Technology 1988PhDT.....3K ADS