

## Publications by Bruno Leibundgut

### 1988

Leibundgut, B.: Light Curves of Supernovae Type I, Ph.D. Thesis, Basel: University of Basel

### 1989

Leibundgut, B.: Measurements of Light Curves of Supernovae Ia, in Particle Astrophysics: Forefront Experimental Issues, ed. Eric B. Norman, Singapore: World Scientific, 201

### 1990

Cadonau, R., Leibundgut, B.: Supernova Studies I: A Catalogue of Magnitude Observations of Supernovae I, *A&AS*, 82, 145

Leibundgut, B.: Supernova Studies II: The Effect of Redshift on Supernovae Ia Light Curves, *A&A*, 229, 1

Leibundgut, B. Tammann, G.A.: Supernova Studies III: The Calibration of the Absolute Magnitude of Supernovae Type Ia, *A&A*, 230, 81

Tammann, G.A., Leibundgut, B.: Supernova Studies IV: The Global Value of  $H_0$  from Supernovae Ia and the Peculiar Motion of the Field Galaxies, *A&A*, 236, 9

Leibundgut, B., Phillips, M.M., Graham, J.A.: SN 1984I - Another Type Ib Supernova, *PASP*, 102, 898

### 1991

Leibundgut, B., Kirshner, R.P., Filippenko, A.V., Shields, J.C., Foltz, C.B., Phillips, M.M., Sonneborn, G.: Pre-Maximum Observations of the Type Ia Supernova SN 1990N, *ApJ*, 371, L23

Leibundgut, B., Kirshner, R.P., Pinto, P.A., Rupen, M.P., Smith, R.C., Gunn, J.E., Schneider, D.P.: Spectra of two very old Supernovae: SN 1986J and SN 1980K, *ApJ*, 372, 531

Leibundgut, B., Tammann, G.A., Cadonau, R., Cerrito, D.: Supernova Studies VII: An Atlas of Light Curves of Supernovae Type Ia, *A&AS*, 89, 537

Leibundgut, B.: Supernovae Ia as Standard Candles, in *Supernovae*, ed. S.E. Woosley, New York: Springer, 751

Leibundgut, B.: Supernovae a Few Years Past Maximum, in *SN 1987A and other Supernovae*, eds. I.J. Danziger and K. Kj ar, Garching: European Southern Observatory, 363

### 1992

Phillips, M.M., Wells, L.A., Suntzeff, N.B., Hamuy, M., Leibundgut, B., Kirshner, R.P., Foltz, C.B.: SN 1991T: Further Evidence for the Heterogeneous Nature of Type Ia Supernovae, *AJ*, 103, 1632

Leibundgut, B., Pinto, P.A.: A distance-independent Calibration of the Luminosity of Type Ia Supernovae and the Hubble Constant, *ApJ*, 401, 49

Jeffery, D.J., Leibundgut, B., Kirshner, R.P., Benetti, S., Branch, D., Sonneborn, G.: Analysis of the Photospheric Epoch Spectra of Supernovae Ia SN 1990N and SN 1991T, *ApJ*, 397, 304

### 1993

Leibundgut, B., et al.: SN 1991bg: A Type Ia Supernova with a Difference, *AJ*, 105, 301

Schmidt, B.P., Kirshner, R.P., Schild, R., Leibundgut, B., et al.: Photometric and Spectroscopic Observations of SN 1990E in NGC 1035: Observational Constraints for Models of Type II Supernovae, *AJ*, 105, 2236

Kirshner, R.P., Jeffery, D.J., Leibundgut, B., Sonneborn, G., Phillips, M.M., Smith, R.C., Winkler, P.F., Winge, C., Roth, K.C., Blades, J.C., Branch, D., Chevalier, R.A., Fransson, C., Panagia, N., Wagoner, R.V., Wheeler, J.C.: SN 1992A: Ultraviolet and Optical Studies Based on HST, IUE, and CTIO Observations, *ApJ*, 415, 589

**1994**

- Richmond, M.W., Treffers, R.R., Filippenko, A.V., Paik, Y., Leibundgut, B., Schulman, E., Cox, C.V.: UBVRI Photometry of SN 1993J in M81, *AJ*, 107, 1022
- Kuchner, M.J., Kirshner, R.P., Pinto, P.A., Leibundgut, B.: Evidence for  $^{56}\text{Ni} \rightarrow ^{56}\text{Co} \rightarrow ^{56}\text{Fe}$  Decay in Type Ia Supernovae, *ApJ*, 426, L89
- Schmidt, B.P., Kirshner, R.P., Leibundgut, B., Wells, L.A., Porter, A.C., Ruiz-Lapuente, P., Challis, P., Filippenko, A.V.: SN 1991T: Reflections of Past Glory, *ApJ*, 434, L19
- Wells, L.A., et al.: The Type Ia Supernova 1989B in NGC 3627 (M66), *AJ*, 108, 2233
- Leibundgut, B.: Observations of Circumstellar Media Around Supernovae, in *Circumstellar Media in Late Stages of Stellar Evolution*, eds. R. Clegg, I. Stevens, P. Meikle, Cambridge: Cambridge University Press, 100
- Leibundgut, B., Spyromilio, J.: Supernovae and the VLT: More Light to Examine, in *Science with the VLT*, eds. J.R. Walsh, I.J. Danziger, Heidelberg: Springer, 203

**1995**

- Leibundgut, B.: Observations of Supernovae, in *The Lives of Neutron Stars*, eds. M.A. Alpar, Ü. Kiziloglu, J. van Paradijs, Dordrecht: Kluwer, 3
- Spyromilio, J., Leibundgut, B.: Type II Supernovae. The Oldest New Kid on the Block, in 17. Texas Symposium, eds. H. Böhringer, G.E. Morfill, J.E. Trümper, New York: New York Academy of Sciences, 356

**1996**

- Leibundgut, B., et al.: Time Dilation in the Light Curve of the Distant Type Ia Supernova SN 1995K, *ApJ*, 466, L21
- Vacca, W.D., Leibundgut, B.: The Rise Times and Bolometric Light Curve of SN 1994D: Constraints on Models of Type Ia Supernovae, *ApJ*, 471, L37
- Spyromilio, J., Leibundgut, B.: Carbon Monoxide in Supernova 1995ad, *MNRAS*, 283, L89
- Van Dyk, S.D., Weiler, K.W., Sramek, R.A., Schlegel, E.M., Filippenko, A.V., Panagia, N., Leibundgut, B.: Type “II<sub>n</sub>” Supernovae: A Search for Radio Emission, *AJ*, 111, 1271
- Barth, A.J., Van Dyk, S.D., Filippenko, A.V., Leibundgut, B., Richmond, M.W.: The Environments of Supernovae in Archive Hubble Space Telescope Images, *AJ*, 111, 2047
- Leibundgut, B.: Light Curves of Supernovae, in *IAU Colloquium 145: Supernovae and Supernova Remnants*, eds. R. McCray, Z. Wang, Cambridge: Cambridge University Press, 11
- Leibundgut, B.: Type Ib/c Supernovae and Their Relation to Binary Stars, in *IAU Symposium 165: Compact Stars in Binaries*, eds. J. van Paradijs, E.P.J. van den Heuvel, E. Kuulkers, Dordrecht: Kluwer, 107
- Leibundgut, B.: Supernova Observations, in *Nuclear Astrophysics*, eds. W. Hillebrandt and E. Müller, Garching: Max-Planck Gesellschaft, 21
- Niemeyer, J.C., Leibundgut, B.: Measuring Omega and Lambda with Type Ia Supernovae, in *Research in Particle-Astrophysics, Ringberg Proceedings of the Sonderforschungsbereich 375*, eds. R. Bender, T. Buchert, P. Schneider, F.von Feilitzsch, München: LMU München, 11
- Leibundgut, B.: The Astronomer – Observer Interface, in *New Observing Modes for the Next Century*, eds. T. Boroson, J. Davies, I. Robson, San Francisco: Astronomical Society of the Pacific, 179

**1997**

- Riess, A.G., Filippenko, A.V., Leonard, D.C., Schmidt, B.P., Suntzeff, N.B., Phillips, M.M., Schommer, R.A., Clocchiatti, A., Kirshner, R.P., Garnavich, P.M., Challis, P., Leibundgut, B., Spyromilio, J., Reiss, D., Smith, R.C.: Time Dilation from Spectral Feature Age Measurements of Type Ia Supernovae, *AJ*, 114, 722
- Leibundgut, B., Spyromilio, J.: Distant Supernovae and Cosmic Deceleration, in *The Early Universe and the VLT*, ed. J. Bergeron, Heidelberg: Springer, 95
- Vacca, W.D., Leibundgut, B.: Modeling the Light Curves of Type Ia Supernovae, in *Thermonuclear Supernovae*, eds. R. Canal, P. Ruiz-Lapuente, J. Isern, Dordrecht: Kluwer, 65
- Leibundgut, B.: Type Ia Supernovae as Distance Indicators, in the electronic proceedings of the workshop 'How far can you go?', ed. D. Egret (<http://astro.u-strasbg.fr/howfar/toc.html>)
- Leibundgut, B.: Operational Concepts of Large Telescopes, in *Optical Telescopes of Today and Tomorrow: Following in the Direction of Tycho Brahe*, ed. A. Ardeberg, Bellingham: SPIE, Vol. 2871, 755

**1998**

- Sollerman, J., Leibundgut, B., Spyromilio, J.: SN 1996N – A type Ib supernova at late phases, *A&A*, 337, 207
- Riess, A.G., Filippenko, A.V., Challis, P., Clocchiatti, A., Diercks, A., Garnavich, P.M., Gilliland, R.L., Hogan, C.J., Jha, S., Kirshner, R.P., Leibundgut, B., Phillips, M.M., Reiss, D., Schmidt, B.P., Schommer, R.A., Smith, R.C., Spyromilio, J., Stubbs, C., Suntzeff, N.B., Tonry, J.: Observational Evidence for an Accelerating Universe and a Cosmological Constant, *AJ*, 116, 1009
- Turatto, M., Mazzali, P.A., Young, T.R., Nomoto, K., Iwamoto, K., Benetti, S., Cappellaro, E., Danziger, I.J., de Mello, D.F., Phillips, M.M., Suntzeff, N.B., Clocchiatti, A., Piemonte, A., Leibundgut, B., Covarrubias, R., Maza, J., Sollerman, J.: The Peculiar Type II Supernova 1997D: A Case for a very low  $^{56}\text{Ni}$  Mass, *ApJ*, 498, L129
- Garnavich, P.M., Kirshner, R.P., Challis, P., Tonry, J., Gilliland, R.L., Smith, R.C., Clocchiatti, A., Diercks, A., Filippenko, A.V., Hamuy, M., Hogan, C.J., Leibundgut, B., Phillips, M.M., Reiss, D., Riess, A.G., Schmidt, B.P., Schommer, R.A., Spyromilio, J., Stubbs, C., Suntzeff, N.B., Wells, L.: Constraints on Cosmological Models from Hubble Space Telescope Observations of High-z Supernovae, *ApJ*, 493, L53
- Schmidt, B.P., Suntzeff, N.B., Phillips, M.M., Schommer, R.A., Clocchiatti, A., Kirshner, R.P., Garnavich, P., Challis, P., Leibundgut, B., Spyromilio, J., Riess, A.G., Filippenko, A.V., Hamuy, M., Smith, R.C., Hogan, C., Stubbs, C., Diercks, A., Reiss, D., Gilliland, R., Tonry, J., Maza, J., Dressler, A., Walsh, J., Ciardullo, R.: The High-z Supernova Search: Measuring Cosmic Deceleration and Global Curvature of the Universe Using Type Ia Supernovae, *ApJ*, 507, 46
- Garnavich, P.M., Jha, S., Challis, P., Clocchiatti, A., Diercks, A., Filippenko, A.V., Gilliland, R.L., Hogan, C.J., Kirshner, R.P., Leibundgut, B., Phillips, M.M., Reiss, D., Riess, A.G., Schmidt, B.P., Schommer, R.A., Smith, R.C., Spyromilio, J., Stubbs, C., Suntzeff, N.B., Tonry, J., Carroll, S.M.: Supernova Limits on the Cosmic Equation of State, *ApJ*, 509, 74
- Galama, T.J., et al.: The unusual supernova in the error box of the  $\gamma$ -ray burst of 25 April 1998, *Nature*, 395, 670
- Iwamoto, K., et al.: A hypernova model for the supernova associated with the  $\gamma$ -ray burst of 25 April 1998, *Nature*, 395, 672

**1998 (cont.)**

- Leibundgut, B.: Type Ia Supernovae and  $q_0$ , in *Supernovae and Cosmology*, eds. L. Labhardt, B. Binggeli, R. Buser, Basel: University of Basel, 61
- Robertson, J.G., Leibundgut, B.: Emission in the Damped Lyman  $\alpha$  Trough of Q2059-360, in *Structure and Evolution of the IGM from QSO Absorption Line Systems*, eds. P. Petitjean, S. Charlot, Paris: Editions Frontières, 271
- Leibundgut, B., Robertson, J.G.: The Complex Line of Sight Towards Q2059-360, in *The Young Universe*, eds. S. D'Odorico, A. Fontana, E. Giallongo, San Francisco: Astronomical Society of the Pacific, 186
- Leibundgut, B.: Supernova Rates, in *Neutrino Astrophysics*, eds. M. Altmann, W. Hillebrandt, T. Janka, G. Raffelt, Munich: Technical University, 51
- Leibundgut, B., Spyromilio, J.: Cosmic Deceleration Measured with Type Ia Supernovae, in *Fundamental Parameters in Cosmology*, eds. J. Tran Thanh Van et al., Paris: Editions Frontières, 417
- Contardo G., Leibundgut, B.: Bolometric Light Curves of Type Ia Supernovae, in *Nuclear Astrophysics*, eds. W. Hillebrandt, E. Müller, Garching: Max-Planck Gesellschaft, 128
- Woudt, P.A., Leibundgut, B., Spyromilio, J.: Evidence for a Cosmological Constant from High- $z$  Supernovae, in *Wide Field Surveys in Cosmology*, eds. S. Colombi, Y. Mellier, B. Raban, Paris: Editions Frontières, 271
- Leibundgut, B., de Marchi, G., Renzini, A.: Science Verification of the VLT Unit Telescope 1, *The Messenger*, 92, 5
- Silva, D.R., Leibundgut, B., Quinn, P.J., Spyromilio, J., Tarenghi, M.: Data Flow System Operations: from the NTT to the VLT, ed. P. Quinn, Bellingham: SPIE vol. 3349, 10
- Avila, G., Delabre, B., Dekker, H., Gilmozzi, R., Leibundgut, B., Pasquini, L., Renzini, A.: VLT/UT2 Nasmyth platform instrumentation: a coordinated high-multiplex facility for high-resolution optical and IR spectroscopy, ed. S. D'Odorico, Bellingham: SPIE 3355, 129

**1999**

- Leibundgut, B., Robertson, J.G.: Emission within a Damped Lyman  $\alpha$  Absorption Trough: The Complex Sight Line Towards Q2059-360, *MNRAS*, 303, 711
- Fesen, R.A., Gerardy, C.L., Filippenko, A.V., Matheson, T., Chevalier, R.A., Kirshner, R.P., Schmidt, B.P., Challis, P., Fransson, C., Leibundgut, B., Van Dyk, S.C.: Late-Time Optical and UV Spectra of SN 1979C and SN 1980K, *AJ*, 117, 725
- Van Dyk, S.D., Peng, C.Y., Barth, A.J., Filippenko, A.V., Chevalier, R.A., Fesen, R.A., Fransson, C., Kirshner, R.P., Leibundgut, B.: Hubble Space Telescope WFPC2 Imaging of SN 1979C and Its Environment, *PASP*, 111, 313
- Giacconi, R., Gilmozzi, R., Leibundgut, B., Renzini, A., Spyromilio, J., Tarenghi, M.: Science verification of the Unit Telescope 1 of the ESO Very Large Telescope, *A&A*, 343, L1
- Lundqvist, P., Sollerman, J., Ray, A., Leibundgut, B., Sutaria, F.: Deep optical observations at the position of PSR1706-44 with the VLT-UT1, *A&A*, 343, L15
- de Marchi, G., Leibundgut, B., Paresce, F., Pulone, L.: A deep optical luminosity function of NGC 6712 with the VLT: Evidence for severe tidal disruption, *A&A*, 343, L9
- Jha, S., et al.: The Type Ia Supernova 1998bu in M96 and the Hubble Constant, *ApJS*, 125, 73
- Leibundgut, B., Schmidt, B.P., Spyromilio, J., Phillips, M.M.: Cosmological Parameters as measured by Type Ia Supernovae, in *Looking Deep in the Southern Sky*, eds. R. Morganti, W. Couch, Heidelberg: Springer, 328
- Leibundgut, B., Contardo, G., Woudt, P.A., Spyromilio, J.: The High-Redshift Supernova Search - Evidence for a Positive Cosmological Constant, in *Dark Matter in Astrophysics and Particle Physics 1998*, eds. H. Klapdor-Kleingrothaus, L. Baudis, Bristol: Institute of Physics Publishing, 222
- Leibundgut, B.: Kosmologie im Umbruch, *Neue Zürcher Zeitung* Nr. 232, 71

**2000**

- Leibundgut, B.: Type Ia Supernovae, *The A&A Review*, 10, 179
- Contardo, G., Leibundgut, B., Vacca, W.D.: Epochs of Maximum Light and Bolometric Light Curves of Type Ia Supernovae, *A&A*, 589, 876
- Sollerman, J., Kozma, C., Fransson, C., Leibundgut, B., Lundqvist, P., Ryde, F., Woudt, P.: SN 1998bw at Late Phases, *ApJ*, 537, L127
- Riess, A.G., et al.: Tests of the Accelerating Universe with Near-Infrared Observations of a High-Redshift Type Ia Supernova, *ApJ*, 536, 62
- Coil, A.L., et al.: Optical Spectra of Type Ia Supernovae at  $z=0.46$  and  $z=1.19$ , *ApJ*, 544, L111
- Baron, E., et al.: Preliminary Spectral Analysis of the Type II Supernova 1999em, *ApJ*, 545, 444
- Leibundgut, B.: Supernovae at High Redshift, in *From Extra-Solar Planets to Cosmology: The VLT Inaugural Symposium*, eds. J. Bergeron and A. Renzini, Heidelberg: Springer, 43
- Leibundgut, B.: Connecting Supernova Theory with Observations, in *Future directions of supernovae research: progenitors to remnant*, ed. S. Cassisi and P. Mazzali, *Mem. Soc. Astr. It.*, 71, 389
- Leibundgut, B., Sollerman, J., Kozma, C., Fransson, C., Lundqvist, P., Ryde, F., Woudt, P.: The late phase of SN 1998bw, *The Messenger*, 99, 36
- Danziger, I.J., et al.: The First Year of Optical-IR Observations of SN 1998bw, in *The greatest explosions since the big bang: supernovae and gamma-ray burts*, ed. M. Livio, N. Panagia, K. Sahu, Baltimore: STSci, 9
- Silva, D., Gilmozzi, R., Leibundgut, B., Mathys, G.: VLT science operations: the first year, in *Observatory Operations to Optimize Scientific Return II*, ed. P. Quinn, Bellingham: SPIE, Vol. 4010, 2
- Quinn, P., Albrecht, M., Grosbøl, P., Leibundgut, B., Peron, M., Silva, D.: ESO data flow system in operations: closing the data loop, in *Observatory Operations to Optimize Scientific Return II*, ed. P. Quinn, Bellingham: SPIE, Vol. 4010, 56
- Ray, A., Lundqvist, P., Sollerman, J., Leibundgut, B., Sutaria, F.: Pulsar optical observation with the Very Large Telescope, in *Pulsar Astronomy - 2000 and Beyond*, eds. M. Kramer, N. Wex, N. Wielebinski, San Francisco: Astronomical Society of the Pacific, 305
- Leibundgut, B.: Das Dynamische Universum, Katalog der Ausstellung "Sieben Hügel – Bilder und Zeichen des 21. Jahrhunderts", eds. B.-M. Baumunk, R. Bülow, Berlin: Berliner Festspiele und Henschel Verlag, 89

**2001**

- Leibundgut, B.: Cosmological Implications from Type Ia Supernovae, *Annual Review Astronomy & Astrophysics*, 39, 67
- Leibundgut, B., Sollerman, J.: A cosmological surprise: the universe accelerates, *Europhysics News*, 32, 121
- Clocchiatti, A., et al.: The Type Ic SN 1990B in NGC 4568, *ApJ*, 553, 886
- Lentz, E. J., et al.: Analysis of the Type II<sub>n</sub> Supernova 1998S: Effects of Circumstellar Interaction on Observed Spectra, *ApJ*, 547, 406
- Patat, F., et al.: The metamorphosis of SN 1998bw, *ApJ*, 555, 900
- Spyromilio, J., Leibundgut, B., Gilmozzi, R.: Carbon Monoxide in type II supernovae, *A&A*, 376, 188
- Koester, D., et al.: High-resolution UVES/VLT spectra of white dwarfs observed for the ESO SN Ia progenitor survey (SPY). I., *A&A*, 378, 556
- Leibundgut, B.: Distant Type Ia Supernovae and Cosmology, in *Nuclei in the Cosmos 2001*, eds. K.-H. Langanke, J. Christensen-Dalsgaard, *Nucl. Phys. A*, 688, 1c
- Napiwotzki, R., et al.: Search for progenitors of supernovae type Ia with SPY, *Astronomische Nachrichten*, 322, 411

**2002**

- Leibundgut, B.: Cosmological implications from observations of type Ia supernovae, *Comp. Phys. Comm.*, 147, 459
- Sollerman, J., Holland, S. T., Challis, P., Fransson, C., Garnavich, P., Kirshner, R. P., Kozma, C., Leibundgut, B., Lundqvist, P., Patat, F., Filippenko, A. V., Panagia, N., Wheeler, J. C.: Supernova 1998bw – the final phases, *A&A*, 386, 944
- Fransson, C., Chevalier, R.A., Filippenko, A.V., Leibundgut, B., Barth, A.J., Fesen, R.A., Kirshner, R.P., Leonard, D.C., Li, W., Lundqvist, P., Sollerman, J., Van Dyk, S.: Optical and Ultraviolet Spectroscopy of SN 1995N: Evidence for Strong Circumstellar Interaction, *ApJ*, 572, 350
- Pun, C.S.J., et al.: Modelling the Hubble Space Telescope Ultraviolet and Optical Spectrum of Spot 1 on the Circumstellar Ring of SN 1987A *ApJ*, 572, 906
- Napiwotzki, R., Koester, D., Nelemans, G., Yungelson, L., Christlieb, N., Renzini, A., Reimers, D., Drechsel, H., Leibundgut, B.: Binaries discovered by the SPY project II. HE1414-0848: A double degenerate with a mass close to the Chandrasekhar limit, *A&A*, 386, 957

**2003**

- Hillebrandt, W., Leibundgut, B. (eds.): *From Twilight to Highlight: The Physics of Supernovae*, Heidelberg, Springer
- Tonry, J. L., et al.: Cosmological Results from High-z Supernovae, *ApJ*, 594, 1
- Williams, B. F., et al.: Imaging and demography of the host galaxies of high-redshift Type Ia supernovae, *AJ*, 126, 2608
- Leibundgut, B., Suntzeff, N. B.: Optical light curves of supernovae, in *Supernovae and Gamma-Ray Bursts*, ed. K. Weiler, Heidelberg: Springer, 77
- Leibundgut, B.: Evidence for an accelerating universe from Type Ia supernovae, in *Astronomy, Cosmology and Fundamental Physics*, eds. P. Shaver, L. DiLella, A. Giménez, Heidelberg: Springer, 13
- Leibundgut, B.: Evidence for an accelerating universe from Type Ia supernovae, in *Texas in Tuscany, XXI Symposium on Relativistic Astrophysics*, eds. R. Bandiera, R. Maiolino, F. Mannucci, Singapore: World Scientific, 285
- Napiwotzki, R., et al.: Search for double degenerate progenitors of supernovae type Ia with SPY, in *White Dwarfs*, eds. D. de Martino, R. Silvotti, J.-E. Solheim, and R. Kalytis Dordrecht: Kluwer, 39
- Napiwotzki, R., et al.: Search for double degenerate progenitors of supernovae type Ia with SPY, in *From Twilight to Highlight: The Physics of Supernovae*, eds. W. Hillebrandt and B. Leibundgut, 134
- Lundqvist, P., Sollerman, J., Leibundgut, B., Baron, E., Fransson, C., Nomoto, K.: Constraining Circumstellar Matter in SNe Ia – High-Resolution Optical Studies with VLT/UVES, in *From Twilight to Highlight: The Physics of Supernovae*, eds. W. Hillebrandt and B. Leibundgut, 309
- Renzini, A., Cesarsky, C., Cristiani, S., da Costa, N. L., Fosbury, R. A. E., Hook, R., Leibundgut, B., Rosati, P., Vandame, B.: ESO for GOODS' Sake, in *The Mass of Galaxies at Low and High Redshift*, eds. R. Bender and A. Renzini, Heidelberg: Springer, 332
- Fynbo, J.P.U., Ledoux, C., Møller, P., Thomsen, B., Burud, I., Leibundgut, B.: Building the bridge between Damped Ly alpha Absorbers and Lyman-Break galaxies, in *Galaxy Evolution: Theory and Observations*, eds. V. Avila-Reese, C. Frenk, C. Allen, *Rev. Mex. Astr. Astroph.*, 17, 258
- Napiwotzki, R., et al.: SPY - the ESO Supernovae type Ia Progenitor survey, *ESO Messenger*, 112, 25
- Hawarden, T. G., et al.: Critical science for the largest telescopes: science drivers for a 100m ground-based optical-IR telescope, in *Future Giant Telescopes*, Eds. R. Angel, R. Gilmozzi, Bellingham: SPIE, Vol. 4840, 299

**2004**

- Riess, A. G., et al.: Identification of Type Ia Supernovae at Redshift 1.3 and Beyond with the Advanced Camera for Surveys on HST, *ApJ*, 600, L163
- Barris, B. J., et al.: Twenty-three High-Redshift Supernovae from the Institute for Astronomy Deep Survey: Doubling the Supernova Sample at  $z > 0.7$ , *ApJ*, 602, 571
- Strolger, L.-G., et al.: The Hubble higher- $z$  supernova search project: Supernovae to  $z \sim 1.6$  and constraints on SN Ia progenitor models, *ApJ*, 613, 200 (Erratum: *ApJ*, 635, 1370)
- Riess, A. G., et al.: Type Ia Supernova Discoveries at  $z > 1$  from the Hubble Space Telescope: Evidence for Past Deceleration and Constraints on Dark Energy Evolution, *ApJ*, 607, 665
- Spyromilio, J., Gilmozzi, R., Sollerman, J., Leibundgut, B., Fransson, C., Cuby, J.-G.: Optical and near infrared observations of SN 1998bu, *A&A*, 426, 547
- Sollerman, J., et al.: The late-time UVOIR light curve of the Type Ia Supernova 2000cx, *A&A*, 428, 555
- Pignata, G., et al.: Photometric Observations of the Type Ia SN 2002er in UGC 10743, *MNRAS*, 355, 178
- Leibundgut, B.: Cosmology with Supernovae, in *Reviews of Modern Astronomy* 17, ed. R. E. Schielicke, Weinheim: Wiley-VCH, 221
- Leibundgut, B.: Are Type Ia Supernovae Standard Candles? in *Hunting the Cosmological Parameters with Precision Cosmology, JENAM 2002*, eds. D. Barbosa, A. Mourao, Dordrecht: Kluwer, Astrophysics and Space Science, 290, 29
- Leibundgut, B., Stritzinger, M.: Adventures of a Supernova Observer, in *Nuclear Astrophysics*, eds. E. Mueller, H.-T. Janka, Garching: Max-Planck Institut Gesellschaft, 80
- Clochiatti, A., Leibundgut, B., Spyromilio, J., Benetti, S., Cappellaro, E., Turatto, M., Phillips, M.M.: SN 1997B and the different types of Type Ic Supernovae, in *Cosmic explosions in three dimensions : asymmetries in supernovae and gamma-ray bursts*, eds., P. Höflich, P. Kumar and J. C. Wheeler, Cambridge: Cambridge University Press, 50
- Napiwotzki, R., et al.: Close binary white dwarfs and supernovae Ia in IAU Colloquium 194, *Compact Binaries in the Galaxy and beyond*, eds. G. Tovmassian and E. Sion, *Rev. Mex. Astr. Astrophys.* 20, 113

**2005**

- Leibundgut, B.: Helle Sterne im Dunklen Universum, *Sterne und Weltraum*, 44, 5 (reprinted in *Sterne und Weltraum Dossier* 1/2006, 22)
- Stritzinger, M., Leibundgut, B.: Lower limits on the Hubble Constant from models of Type Ia Supernovae, *A&A*, 431, 423
- Blondin, S., Walsh, J. R., Leibundgut, B., Sainton, G.: Extracting clear supernova spectra: Towards a quantitative analysis of high-redshift Type Ia supernova spectra, *A&A*, 431, 757
- Matheson, T., et al.: Spectroscopy of High-Redshift Supernovae from the ESSENCE Project: The First Two Years, *AJ*, 129, 2352
- Fransson, C., et al.: Hubble Space Telescope and Ground-Based Observations of SN 1993J and SN 1998S: CNO Processing in the Progenitors, *ApJ*, 622, 991
- Mazzali, P. A., et al.: High-Velocity Features: A Ubiquitous Property of Type Ia Supernovae, *ApJ*, 623, L37
- Sollerman, J., et al.: Diffuse Interstellar Bands in NGC 1448, *A&A*, 429, 559
- Pastorello, A., et al.: SN 1998A: explosion of a blue supergiant, *MNRAS*, 360, 950
- Mattila, S., Lundqvist, P., Sollerman, J., Kozma, C., Baron, E., Fransson, C., Leibundgut, B., Nomoto, K.: Early and late time VLT spectroscopy of SN 2001el - progenitor constraints for a type Ia supernova, *A&A*, 443, 649
- Krisciunas, K., et al.: Hubble Space Telescope Observations of nine High-Redshift ESSENCE Supernovae, *AJ*, 130, 2453

**2005 (cont.)**

- Leibundgut, B.: Optical Light Curves of Supernovae, in IAU Colloquium 192: Cosmic Explosions, eds. J. Marcaide, K. Weiler, Heidelberg: Springer, 173
- Leibundgut, B., Blondin, S.: Evidence for dark energy from Type Ia Supernovae, in Eighth International Workshop on Topics in Astroparticle and Underground Physics (TAUP2003), Amsterdam: Elsevier Nuclear Physics B, 138, 10
- Leibundgut, B.: Supernovae as astrophysical objects, in Frontiers of Cosmology, eds. A. Blanchard and M. Signore, Dordrecht: Springer, 195
- Leibundgut, B.: Cosmology with Supernovae, in Frontiers of Cosmology, eds. A. Blanchard and M. Signore, Dordrecht: Springer, 207
- Stritzinger, M., Leibundgut, B.: Constraining the Hubble Constant from Models of Type Ia Supernovae, in 1604-2004: Supernovae as Cosmological Lighthouses, eds. M. Turatto, S. Benetti, L. Zampieri, W. Shea, San Francisco: Astronomical Society of the Pacific, 342, 270
- Pignata, G., et al.: Optical and Infrared Observations of SN 2002dj: a Twin of SN 2002bo, in 1604-2004: Supernovae as Cosmological Lighthouses, eds. M. Turatto, S. Benetti, L. Zampieri, W. Shea, San Francisco: Astronomical Society of the Pacific, 342, 266
- Napiwotzki, R., et al.: Double degenerates and progenitors of supernovae Type Ia, in Spectroscopically and Spatially Resolving the Components of Close Binary Stars, eds. R.W. Hilditch, H. Hensberge, K. Pavlovski, San Francisco: Astronomical Society of the Pacific, 318, 402
- Napiwotzki, R., et al.: New Results from the Supernova Ia Progenitor Survey, in 14<sup>th</sup> European Workshop on White Dwarfs, eds. D. Koester and S. Moehler, San Francisco: Astronomical Society of the Pacific, 334, 375

**2006**

- Blondin, S., et al.: Using Line Profiles to Test the Fraternity of Type Ia Supernovae at High and Low Redshifts, *AJ*, 131, 1648
- Stritzinger, M., Leibundgut, B., Walch, S., Contardo, G.: Constraints on the Progenitor Systems of Type Ia Supernovae, *A&A*, 450, 241
- Elmhamdi, A., Danziger, I.J., Branch, D., Leibundgut, B., Baron, E., Kirshner, R.P.: Understanding photospheric spectra of Core Collapse Supernovae, *A&A*, 450, 305
- Clocchiatti, A., et al.: Hubble Space Telescope and Ground-Based Observations of Type Ia Supernovae at Redshift 0.5: Cosmological Implications, *ApJ*, 642, 1
- Gröningsson, P., Fransson, C., Lundqvist, P., Nymark, T., Lundqvist, R., Chevalier, R., Leibundgut, B., Spyromilio, J.: Coronal emission from the shocked circumstellar ring of SN 1987A, *A&A*, 456, 581
- Whitelock, P.A., Dennefeld, M., Leibundgut, B. (eds.): Scientific Requirements for Extremely Large Telescopes, Proceedings of IAU Symposium 232, Cambridge: Cambridge University Press
- Dennefeld, M., Leibundgut, B., Whitelock, P.A.: Reconciliation of science requirements with technological possibilities: final discussion, in Scientific Requirements for Extremely Large Telescopes, Proceedings of IAU Symposium 232, eds. P.A. Whitelock, M. Dennefeld, B. Leibundgut, Cambridge: Cambridge University Press, 488
- Peacock, J., Schneider, P., Efstathiou, G., Ellis, J.R., Leibundgut, B., Lilly, S., Mellier, Y.: Report by the ESA-ESO Working Group on Fundamental Cosmology, Garching: ST-ECF (also available as astro-ph/0610906)
- Sollerman, J., et al.: Supernova Cosmology and the ESSENCE project, in Beyond Einstein – Physics for the 21st Century, eds. M. Cruise and L. Ouwehand, Nordwijk: ESA Publications, SP-637

**2007**

- Kjær, K., Leibundgut, B., Fransson, C., Gröningsson, P., Spyromilio, J., Kissler-Patig, M.: Infrared Integral Field Spectroscopy of SN 1987A, *A&A*, 471, 617
- Miknaitis, G., et al.: The ESSENCE Supernova Survey: Survey Optimization, Observations, and Supernova Photometry, *ApJ*, 666, 674
- Wood-Vasey, M., et al.: Observational Constraints on the Nature of the Dark Energy: First Cosmological Results from the ESSENCE Supernova Survey, *ApJ*, 666, 694
- Davis, T.M., et al.: Scrutinizing Exotic Cosmological Models Using ESSENCE Supernova Data Combined with Other Cosmological Probes, *ApJ*, 666, 716
- Aschenbach, B., Burvitz, V., Hasinger, G., Leibundgut, B. (eds.): *Relativistic Astrophysics and Cosmology - Einstein's Legacy*, Heidelberg, Springer
- Leibundgut, B., Stritzinger, M.: Global parameters of Type Ia supernovae, in *Highlights of Astronomy Vol. 14*, ed. K. van der Hucht, Cambridge: Cambridge University Press, 310
- Kjær, K., Leibundgut, B.: SN 1987A: A Complex Physical Laboratory, in *Science Perspectives for 3D Spectroscopy*, eds. M. Kissler-Patig, J.R. Walsh, M.M. Roth, Heidelberg: Springer, 333
- Elmhamdi, A., Danziger, I.J., Branch, D., Leibundgut, B.: Hydrogen issue in core collapse supernovae, in *The Multicolored Landscape of Compact Objects and their Explosive Origins*, eds. L.A. Antonelli, G.L. Israel, L. Piersanti, A. Tornambè, New York: American Institute of Physics, AIP Conference Proceedings 924, 277
- Kjær, K., Leibundgut, B., Fransson, C., Spyromilio, J.: Integral Field Spectroscopy of SN 1987A, in *Supernova 1987A: 20 Years After*, eds. S. Immler, K. Weiler, R. McCray, New York: American Institute of Physics, AIP Conference Proceedings 937, 76
- Kjær, K., Gröningsson, P., Kotak, R., Fransson, C., Leibundgut, B.: SN 1987 at the end of its second decade, in *The Multicolored Landscape of Compact Objects and their Explosive Origins*, eds. L.A. Antonelli, G.L. Israel, L. Piersanti, A. Tornambè, New York: American Institute of Physics, AIP Conference Proceedings 924, 366
- Fransson, C., Gilmozzi, R., Gröningsson, P., Hanuschik, R., Kjær, K., Leibundgut, B., Spyromilio, J.: Twenty years of Supernova 1987A, *ESO Messenger*, 127, 44
- Napiwotzki, R., et al.: Binary White Dwarfs in the Supernova Ia Progenitor Survey, *15<sup>th</sup> European Workshop on White Dwarfs*, R. Napiwotzki and M. R. Burleigh (eds.), San Francisco: Astronomical Society of the Pacific Conference Series 327, 387

**2008**

- Leibundgut, B.: Supernovae and Cosmology, *Gravitation and General Relativity*, 40, 221
- Gröningsson, P., et al.: High resolution spectroscopy of the inner ring of SN 1987A, *A&A*, 479, 761
- Clocchiatti, A., et al.: Late-Time HST Photometry of SN 1994I: Hints of Positron Annihilation Energy Deposition, *PASP*, 120, 290
- Becker, A., et al.: Exploring the Outer Solar System with the ESSENCE Supernova Survey, *ApJ*, 682, L53
- Pignata, G., et al.: Optical and IR observations of SN 2002dj: some possible common properties of fast expanding SNe Ia, *MNRAS*, 388, 971
- Blondin, S., et al.: Time dilation in Type Ia Supernova Spectra at High Redshift, *ApJ*, 682, 724
- Foley, R., et al.: Constraining Cosmic Evolution of Type Ia Supernovae, *ApJ*, 684, 68
- Milisavljevic, A., Fesen, R. A., Leibundgut, B., Kirshner, R. P.: The evolution of late-time optical emission from SN 1986J, *ApJ*, 684, 1170
- Gröningsson, P., Fransson, C., Leibundgut, B., Lundqvist, P., Challis, P., Chevalier, R. A., Spyromilio, J.: Time evolution of the line emission from the inner circumstellar ring of SN 1987A and its hot spots, *A&A*, 492, 481

**2009**

- Foley, R., et al.: Spectroscopy of High-Redshift Supernovae from the ESSENCE Project: The First Four Years, *AJ*, 137, 3731
- Boutsia, K., Leibundgut, B., Trevese, D., Vagnetti, F.: Spectroscopic follow-up of variability-selected active galactic nuclei in the Chandra Deep Field South, *A&A*, 497, 81
- Leibundgut, B.: Creating a legacy and learning about dark energy – Commentary on: Astier et al., 2006, *A&A*, 447, 31; 2009, *A&A*, 500, 615

**2010**

- Kjaer, K., Leibundgut, B., Fransson, C., Jerkstrand, A., Spyromilio, J.: The 3-D structure of SN 1987A's inner ejecta, *A&A*, 517, A51
- Leibundgut, B.: Astrophysics for the next decade, in *Science with 8-10m telescopes in the era of ELTs and the JWST*, C. Warden, ed. Madrid: Fundación Ramón Areces, 32
- K. Boutsia, B. Leibundgut, D. Trevese, F. Vagnetti, 2010: Selecting AGN through variability in SN datasets, *Proceedings of the 9th Hellenic Astronomical Society Conference, Athens, San Francisco: Astronomical Society of the Pacific Conference Series*, 424, 277

**2011**

- Goobar, A., Leibundgut, B.: Supernova Cosmology: Legacy and Future, *Annual Reviews of Nuclear and Particle Science*, 61, 251
- Larsson, J., et al.: X-ray illumination of the ejecta of supernova 1987A, *Nature*, 474, 484
- Greiner, J., et al.: GRIPS - Gamma-Ray Imaging, Polarimetry and Spectroscopy, *Experimental Astronomy*, 31, 73
- Wang, X., et al.: Evidence for Type Ia Supernova Diversity from Ultraviolet Observations with the Hubble Space Telescope, *ApJ*, submitted (arXiv1110.5809)
- Leibundgut, B. and Bartelmann, M.: Das beschleunigte Universum, *Physik in unserer Zeit*, 42, 274
- Leibundgut, B.: Supernovae entdecken die beschleunigte Expansion des Universums, *Physik Journal*, submitted
- Leibundgut, B.: Die Vermessung des Universums, terra incognita. *Weltbilder - Welterfahrungen, Katalog zur Ausstellung in der Universitätsbibliothek Kunst+Technik der Technischen Universität Dresden*, Hrs. Sabine Zimmermann-Törne, p. 99

**Short contributions:**

- Leibundgut, B., Pinto, P.A., 1990: The Luminosity of Type Ia Supernovae, *BAAS*, 22, 1212
- Sonneborn, G., Kirshner, R.P., Leibundgut, B., Foltz, C.B., Phillips, M.M., 1990: Pre-Maximum Observations of SN 1990N, *BAAS*, 22, 1213
- Leibundgut, B., 1991: The Photometric Uniformity of Type Ia Supernovae, *BAAS*, 23, 882
- Vacca, W.D., Leibundgut, B., 1994: Analysis of the Light Curves of Type I Supernovae, *BAAS*, 25, 833
- Leibundgut, B., Kirshner, R.P., Porter, A.C., 1994: The Optical Light Curves of SN 1980K, *BAAS*, 25, 834
- Treffers, R.R., Leibundgut, B., Filippenko, A.V., Richmond, M.W., 1994: Leuschner Observatory Supernova Search (LOSS), *BAAS*, 25, 834
- Paik, Y.B., Filippenko, A.V., Treffers, R.R., Leibundgut, B., Richmond, M.W., 1994: B.A.I.T. Photometry of SN 1993J in M 81 (NGC 3031), *BAAS*, 25, 893
- Schmidt, B.P., et al., 1996: Measuring Cosmic Deceleration and Global Curvature from Observations of Distant Supernovae, *BAAS*, 189, 1080
- Garnavich, P.M., et al., 1997: Constraints on Cosmological Models from Hubble Space Telescope Observations of High-z Supernovae, *BAAS*, 191, 8503
- Garnavich, P. M., et al. 1998: Supernova Limits on the Cosmic Equation of State, *BAAS*, 193, 3905
- Schmidt, B.P., Leibundgut, B., et al., 1995: Beyond the Hubble Constant, *ESO Press Release*

09/95

- Leibundgut, B., et al., 1995: Discovery of a Supernova (SN 1995K) at a Redshift of 0.478, *The Messenger*, 81, 19
- Pirenne, B., Albrecht, M., Leibundgut, B., 1998: ESO and ST-ECF Archive News, *The Messenger*, 93, 20
- Leibundgut, B., Spyromilio, J., et al., 1998: Distant Supernovae Indicate Ever-Expanding Universe, ESO Press Release 21/98
- Leibundgut, B., Hillebrandt, W., 2002: From Twilight to Highlight: The Physics of Supernovae. ESO/MPA/MPE summer workshop 2002, *ESO Messenger*, 109, 52
- Leibundgut, B., Grothkopf, U., Treumann, A., 2003: Metrics to Measure ESO's Scientific Success, *ESO Messenger*, 114, 46
- Grothkopf, U., Delmotte, N., Leibundgut, B., Rainer, N., Treumann, A., 2004: The ESO Telescope Bibliography on the Web: Linking Publications and Observations, *BAAS*, 20518206
- Miknaitis, G., et al., 2004, ESSENCE: Progress toward a Large Sample of Intermediate Redshift SNe to Constrain  $w$ , *BAAS*, 20517812
- Krisciunas, K., et al., 2004: The First Photometry from the ESSENCE Project, *BAAS*, 205.6909
- Wagner, S., Leibundgut, B., 2004: Report on the Workshop on Large Programmes and Surveys 2003, *ESO Messenger*, 111, 60
- Grothkopf, U., Leibundgut, B., Macchetto, F., Madrid, J. P., Leitherer, C., 2005: Comparison of Science Metrics among Observatories, *ESO Messenger*, 119, 45
- Kissler-Patig, M., Kaufer, A., Leibundgut, B., Mirabel, F., 2005: ESO Studentships: PhD Opportunities in Garching and Santiago, *ESO Messenger*, 120, 44
- Sadler, E.M., et al., 2006: Commission 28: Galaxies, ed. O. Engvold, *Proceedings of IAU Symposium No. XXVIA*, Cambridge: Cambridge University Press, 281
- Leibundgut, B., 2007: Dunkle Energie im frühen Universum?, *Physik Journal*, 6, 16
- Grothkopf, U., Melo, C., Erdmann, C., Kaufer, A., Leibundgut, B., 2007: Using the h-index to Explore the Scientific Impact of the VLT, *ESO Messenger*, 128, 62
- West, M., Leibundgut, B., 2008: Report on the 2007 ESO Fellowship Symposium, *ESO Messenger*, 131, 48
- Combes, F., et al., 2008: Commission 28: Galaxies, *Transactions IAU, Reports on Astronomy 2006-2009*, Karel van der Hucht (ed.), Cambridge: Cambridge University Press, 286
- Hillebrandt, W., et al., 2008: Division VIII / Working Group Supernova, *Transactions IAU, Reports on Astronomy 2006-2009*, Karel van der Hucht (ed.), Cambridge: Cambridge University Press, 295
- Suntzeff, N.B., et al., 2009: Supernova Cosmology Results From Six Years of ESSENCE, *AAS Meeting 213*, 481.06
- Mathys, G., Leibundgut, B., 2009: Report on the ESO Workshop Large Programmes, *ESO Messenger*, 135, 53
- West, M., Rejkuba, M., Leibundgut, B., Emsellem, E., 2009: ESO's Studentship Programmes: Training Tomorrow's Astronomers Today, *ESO Messenger*, 135, 57
- Melnick, J., Mellier, Y., Pasquini, L. Leibundgut, B., 2009: Report on the ESO workshop 'Wide-Field Spectroscopic Surveys' held at ESO Headquarters, Germany, 1011 March 2009, *ESO Messenger*, 136, 64
- Leibundgut, B., Lindberg Christensen, L., Janssen, E., 2009: ESO at Jenam 2009, *ESO Messenger*, 136, 72
- Emsellem, E., West, M., Leibundgut, B., 2009: Report on the 2009 ESO Fellows Symposium, *ESO Messenger*, 137, 56
- de Zeeuw, T., Leibundgut, B., Fosbury, R., D'Odorico, S.: In memoriam Alan Moorwood *ESO Messenger*, 145, 49
- 57 IAU Circulars and Astronomical Telegrams (Supernova discoveries and classifications; 1984–1986, 1989–1993 and 1995–2010)

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