Murphy (2008). The magnetospheric magnetic field could have time-dependencies on timescales similar to the solar cycle (i.e., with periods ∼20 yr).

From the observational point of view, significant progress will be possible through the analysis of other bipolar HH jets. Such studies should include both objects with good jet/counterjet symmetries (such as HH 211, see, e.g., Lee et al. 2010) and objects with evident asymmetries (such as HH 228, see Wang & Henning 2009).

Finally, in § 2.2 we have described a model for relativistic, quasi-symmetric binary ejections. An application of this model to observations of relativistic jets is left for a future paper.

This work was supported by the Conacyt grants 61547, 101356 and 101975.

REFERENCES

Bally, J., & Reipurth, B. 2001, ApJ, 546, 299
Cabrit, S., Codella, C., Gueth, F., Nisini, B., Gusdorf, A., Dougados, C., & Bacciotti, F. 2007, A&A, 468, L29
Curiel, S., Raga, A. C., Raymond, J. C., Noriega-Crespo, A., & Cantó, J. 1997, AJ, 114, 2736
Curiel, S., et al. 2006, ApJ, 638, 878
De Buizer, J. M., & Vacca, W. D. 2010, AJ, 140, 196
De Colle, F., Gracía, J., & Murphy, G. 2008, ApJ, 688, 1137
Fazio, G., et al. 2004, ApJS, 154, 10
García López, R., Nisini, B., Giannini, T., Eislöffel, J., Bacciotti, F., & Podio, L. 2008, A&A, 487, 1019
Gredel, R., & Reipurth, B. 1994, A&A, 289, L19
Gyul'budagyan, A. L. 1984, Astrophysics, 20, 75
Hartigan, P., Morse, J. A., Reipurth, B., Heathcote, S., & Bally, J. 2001, ApJ, 559, L157
Lee, C.-F., Hasegawa, T. I., Hirano, N., Palau, A., Shang, H., Ho, P. T. P., & Zhang, Q. 2010, ApJ, 713, 731
Looney, L. W., Tobin, J. J., & Kwon, W. 2007, ApJ, 670, L131
López, R., García-Lorenzo, B., Sánchez, S. F., Gómez, G., Estalella, R., & Riera, A. 2008, MNRAS, 391, 1107
Lovelace, R. V. E., Romanova, M. M., Ustyugova, G. V., & Koldoba, A. V. 2010, MNRAS, 408, 2083
Menten, K. M., Reid, M. J., Forbrich, J., & Brunthaler, A. 2007, A&A, 474, 515
Noriega-Crespo, A., et al. 2004a, ApJS, 154, 352
Noriega-Crespo, A., et al. 2004b, ApJS, 154, 402
Raga, A. C., Noriega-Crespo, A., Lora, V., Stapelfeldt, K. R., & Carey, S. J. 2011, ApJ, 730, L17
Ramsey, J. P., & Clarke, D. A. 2011, ApJ, 728, L11
Reipurth, B., Heathcote, S., Morse, J., Hartigan, P., & Bally, J. 2002, AJ, 123, 362
Rieke, G. H., et al. 2004, ApJS, 154, 25
Rodríguez, L. F., Torrelles, J. M., Anglada, G., & Reipurth, B. 2008, AJ, 136, 1852
Salmeron, R., Königl, A., & Wardle, M. 2011, MNRAS, 412, 1162
Smith, M. D., O'Connell, B., & Davis, C. J. 2007, A&A, 466, 565
Stute, M., Gracía, J., Tsinganos, K., & Vlahakis, N. 2010, A&A, 516, A6
Tobin, J. J., Looney, L. W., Mundy, L. G., Kwon, W., & Hamidouche, M. 2007, ApJ, 659, 1404
Wang, H., & Henning, T. 2009, AJ, 138, 1072
Woitas, J., Ray, T. P., Bacciotti, F., Davis, C. J., & Eislöffel, J. 2002, ApJ, 580, 336
Yamada, M., Machida, M. N., Inutsuka, S., & Tomisaka, K. 2009, ApJ, 703, 1141
Ybarra, J. E., & Lada, E. A. 2009, ApJ, 695, 120

S. J. Carey and A. Noriega-Crespo: Spitzer Science Center, California Institute of Technology, Pasadena, CA 91125, USA (carey, alberto@ipac.caltech.edu).
V. Lora: Astronomisches Rechen-Institut Zentrum für Astronomie der Universität Heidelberg, Mönchhofstr. 12-14 69120 Heidelberg, Germany (vlora@ari.uni-heidelberg.de).
A. C. Raga and J. C. Rodríguez-Ramírez: Instituto de Ciencias Nucleares, Universidad Nacional Autónoma de México, Apdo. Postal 70-543, 04510 D.F., Mexico (raga, juan.rodriguez@nucleares.unam.mx).
K. R. Stapelfeldt: Jet propulsion Laboratory, California Institute of Technology, MS 183-900, 4800 Oak Grove Drive, Pasadena, CA 91109, USA (krs@exoplanet.jpl.nasa.gov).