

Science with the VLT Interferometer: Proceedings of the ESO Workshop Held at Garching, Germany, 18–21 June 1996, ISSN 1431-2433; 1997; Springer Berlin Heidelberg, 1997; 404 pages; Francesco Paresce; 9783540632641

The VLT Interferometer. A. Richichi. European Southern Observatory, Karl-Schwarzschildstr. 2, 85748 Garching b. M., Germany. email: arichich@eso.org. Abstract. The ESO Very Large Telescope Interferometer (VLTI) is arguably the most powerful optical interferometric facility available at present. In addition to the wide choice of baselines and the light collecting power of its 8.2 m and 1.8 m telescopes, the VLTI also offers a smooth and user-friendly operation which makes interferometry accessible to any astronomer and covers a wide range of scientific applications. The proceedings series *Advances in Social Science, Education and Humanities Research* aims to publish proceedings from conferences on the theories and methods in fields of social sciences, education and humanities. Read full Aims & Scope. All proceedings in this series are open access, i.e. the articles published in them are immediately and permanently free to read, download, copy & distribute. This is to ensure the integrity and quality of the proceedings that we publish. For any questions about this series, please contact our publishing team. Latest Volumes Most Downloaded Most Cited Upcoming Volumes. Proceedings of the International Conference on Educational Assessment and Policy (ICEAP 2020). Proceedings of the ESO Workshop Held at Garching, Germany, 18–21 June 1996. Editors: Paresce, Francesco (Ed.) Free Preview. ESO's VLT Interferometer will employ an array of four 8 m and three 1.8 m diameter telescopes coherently combined to reach an unprecedented resolution of a millisecond of arc in the visible/IR for objects as faint as 24th visual magnitude. Thus it will open up vast new frontiers in modern astronomy. This book is in preparation for the first observations expected at the beginning of the next century. All areas to be seriously mined with this new facility are presented in a clear and brief exposition with an emphasis on what the VLTI can actually accomplish. The Power of Optical/IR Interferometry: Recent Scientific Results and 2nd Generation Instrumentation Proceedings of the ESO Workshop held in Garching, Germany, 4-8 April 2005. ABC. Volume Editors. These new interferometers along with their sophisticated instrumentation have provided new levels of accuracy, spectral resolution and access to various spectral bands from the optical to the thermal infrared. Investigations are now enabled on a wealth of astrophysical sources with unprecedented levels of angular resolution and sensitivity, producing a considerable body of new, exciting scientific results. This second part of the workshop was organized in collaboration with the European Interferometry Initiative (EII). VI. Preface. High Resolution Infrared Spectroscopy in Astronomy: Proceedings of an ESO Workshop Held at Garching, Germany, 18-21 November 2003. January 2005. DOI: 10.1007/b96749. Extensive rovibrational line lists were computed for nine isotopologues of the CO molecule, namely, $^{12}\text{C}^{16}\text{O}$, $^{12}\text{C}^{17}\text{O}$, $^{12}\text{C}^{18}\text{O}$, $^{13}\text{C}^{16}\text{O}$, $^{13}\text{C}^{17}\text{O}$, $^{13}\text{C}^{18}\text{O}$, $^{14}\text{C}^{16}\text{O}$, $^{14}\text{C}^{17}\text{O}$, and $^{14}\text{C}^{18}\text{O}$ in the ground electronic state with $v=1$, $v=2$, and $J=150$. The line intensity and position calculations were carried out using a newly determined piece-wise dipole moment function (DMF) in conjunction with the wavefunctions calculated from an experimentally determined potential energy function from Coxon & Hajigeorgiou.