High angular resolution studies of protoplanetary discs

Panic, O.

HIGH ANGULAR RESOLUTION STUDIES OF PROTOPLANETARY DISCS

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PROEFSCHRIFT

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van de Rector Magnificus prof. mr. P. F. van der Heijden,
volgens besluit van het College voor Promoties
te verdedigen op dinsdag 27 oktober 2009
te klokke 13.45 uur

door

Olja Panić

geboren te Gračanica, Bosnië Herzegovina
in 1978

Promotiecommissie

Promotor:	Prof. dr. E.F. van Dishoeck
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The great use of life is to spend it for something that will outlast it.
WILLIAM JAMES

Front cover: The 'Constellation number 4', painted by M. Barceló in 1970, some time before first discs around young stars were imaged. The painting closely resembles a rotating disc of gas and dust seen face-on, with pebbles, rocks and perhaps a few planets. The disc surface (yellow) illuminated by the star is not perfectly symmetric and one side appears 'warmer' than the other, an amazing coincidence to disc observations in Chapter 7 of this thesis. The insects in the painting can be seen as the potential for life: It is not clear whether these will survive the rough conditions as it is not clear whether the delicate conditions for life exist in the planetary systems we observe around other stars. The great detail in the painting draws us to look ever closer, trying to resolve the structure. With ALMA in future we may be able to do this.

MIQUEL BARCELÓ
CONSTEL·LACIÓ NÚMERO 4, 1970
Oil on canvas 200×200 cm
MUSEÚ FUNDACÍON JUAN MARCH, PALMA (SPAIN)

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