DISCUSSION FOLLOWING PAPER II.3 GIVEN BY H.C.D. VISSER

MARK: Visser and I felt that it would be good to complement his talk with some preliminary results where we compare the observed wave amplitude of Schweizer with the relative amplitude as suggested by the theoretical calculation of spiral modes. For a reasonably realistic model of M81 which includes about 25% of bulge matter, we find that the amplitudes as observed by Schweizer compare very well with the amplitude distributions in the two dominant spiral modes.

TOOMRE: How did you get the amplitude?

MARK: Our relative amplitudes as stated give the values of the amplitude at one radius relative to that at other radii. The absolute value is not predicted by present theory but one chosen for the best fit of the observations. This run of amplitudes is already very suggestive.

VAN DEN BERGH: Recently a number of people have suggested that the optical peculiarities of M82 might be due to a recent encounter with M81. Do you see any evidence for such an encounter in the velocity field of M81?

VISSER: The major axis of the velocity field is not a straight line, but is curved in the outer regions. This indicates that in the outer regions the disk may be warped, which might be due to an encounter with M82.

"I think you should include numerical simulation in the category of observation too."

A.J. Kalnajs in Discussion II.4

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