Technical Page

Proposal Type: Regular
General Category: Astronomy
Sub-Category: Spectroscopy
Observation Category: Extragalactic
Total Time Requested: 30 Hours

Proposal Title: Confirmation of Low Mass Systems in the NGC 628 Galaxy Group

ABSTRACT:
Recent surveys suggest that at the lowest HI masses ($< 10^8$ M$_\odot$) there may be a large population of (sub-)dwarf galaxies with very low optical luminosity and surface brightness. We have carried out a deep, survey covering about 1 Mpc$^2$ centered on NGC 628 with the upgraded Westerbork array. We request observing time to obtain confirming data for 41 uncataloged, tentative detections of low mass galaxies ($M_{HI}$ between a few times $10^6$ and a few times $10^7$ M$_\odot$) in this group. Only one of these sources has a clear optical counterpart, three have faint wisps and the remaining 37 have no obvious optical emission down to the POSS limiting surface brightness.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
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<tbody>
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</tbody>
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I NA want to do remote observing.

Instrument Setup

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned