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function [ r, t ] = matrt( dim, centreij )

% MATRT  Make polar coordinate matrices
%
% [ r, t ] = matrt( dim, centreij )

% 18-Oct-1999 -- created (RFM)

% set default arguments
defarg('centreij',[]);

% make xy coordinate matrices
[x,y] = matxy(dim,centreij);

% convert to polar coordinates
r = sqrt(x.^2+y.^2);
if nargout>=2
     t = atan2(y,x);
end

return
```