

# bound on eigenvalues...

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Hi all,

Given a matrix

A =

0.1337 0.1115 0.1647  
0.1115 0.1584 0.1362  
0.1647 0.1362 0.2089

I know by numerical computation that its eigenvalues are:

ans =

0.0023  
0.0513  
0.4475

so any number  $> 0.4475$  is the bound on the eigenvalues...

But how do I find bound analytically?

Can I prove that the eigenvalues are less than a number, say, 0.8, or 0.9, or  $x$ , where  $x < 1$  strictly analytically?

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• *Follow-Ups:*

- ◆ ***Re: bound on eigenvalues...***  
    ◇ *From:* Robert Israel
- ◆ ***Re: bound on eigenvalues...***  
    ◇ *From:* alexandru . lupas
- ◆ ***Re: bound on eigenvalues...***  
    ◇ *From:* José Carlos Santos

- Prev by Date: ***Re: Topologically what is a torus in 2-d; difference between torus and sphe***
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