Info

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Standard representation of S_3

Definition. Standard representation of S_3

The subrepresentation of

> Definition. Permutation representation of S_3
>
> $$S_3 \curvearrowright \mathbb{F}^3$$
> $$g(e_i) \mapsto (e_{g(i)})$$

on

$$\mathrm{P}(1,1,1) := \{(z_1, z_2, z_3) \in \mathbb{C}^3 : z_1 + z_2 + z_3 = 0\}$$

This is a 2 dimensional *irreducible* representation.

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	on $\mathbb{C}^3$ with standard basis	on $P(1,1,1)$ with basis e_1, e_2
i	I_3	I_2
$(1\ 2)$		$\begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$
$(2\ 3)$		
$(1\ 3)$		
$(1\ 2\ 3)$		$\begin{bmatrix} 0 & -1 \\ 1 & -1 \end{bmatrix}$
$(1\ 3\ 2)$		

Current note has 0 direct children and 0 total descendants.

- stretchy
  - Symmetric group
    - S_3
      - Standard representation of S_3

And it has 2 siblings.

- stretchy
  - Symmetric group
    - S_3
      - Permutation representation of S_3
      - Standard representation of S_3