

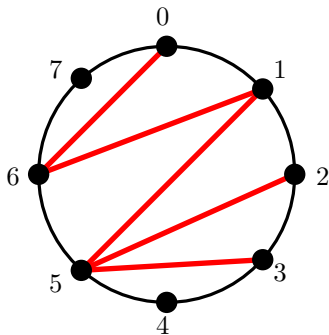
Flips des accordéons et mutation

Yann Palu

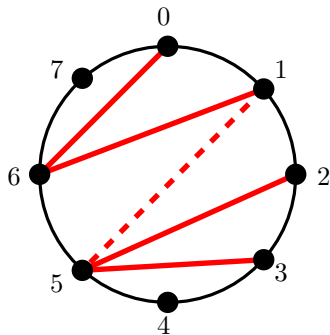
Université de Picardie Jules Verne

Judi 30 mai 2024 - CHARMS

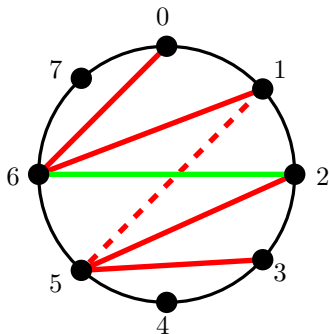
Introduction: Flips



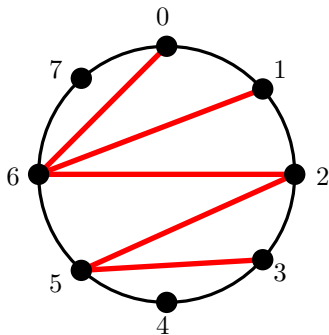
Introduction: Flips



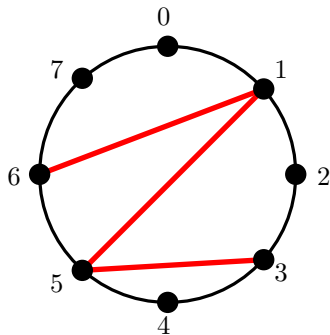
Introduction: Flips



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Accordéons

On fixe une dissection \mathcal{D} d'un polygone convexe.

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Définition

- Un accordéon est une diagonale du polygone "compatible" à la dissection \mathcal{D} .

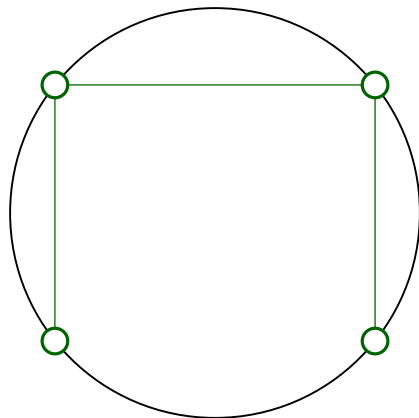
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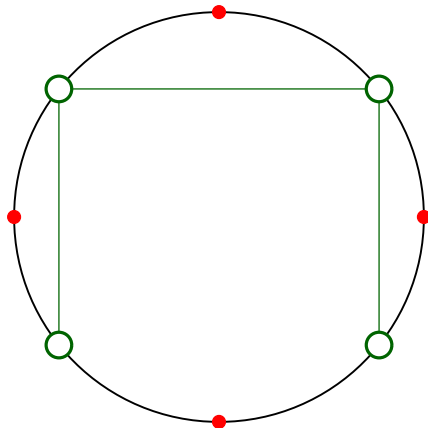
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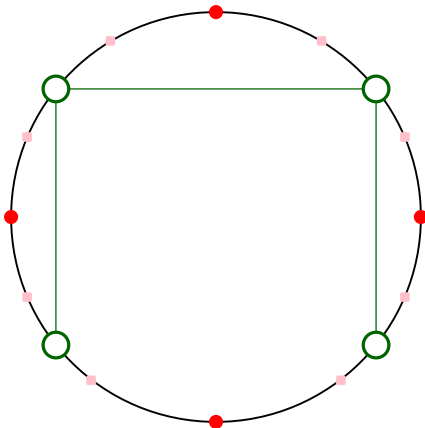
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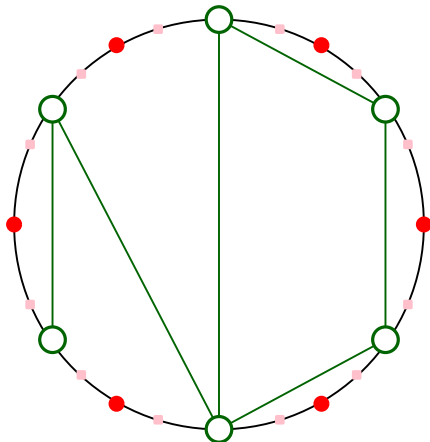
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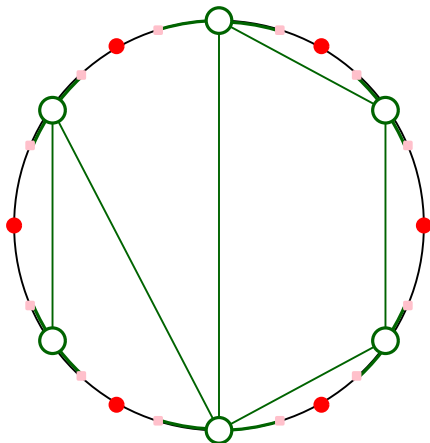
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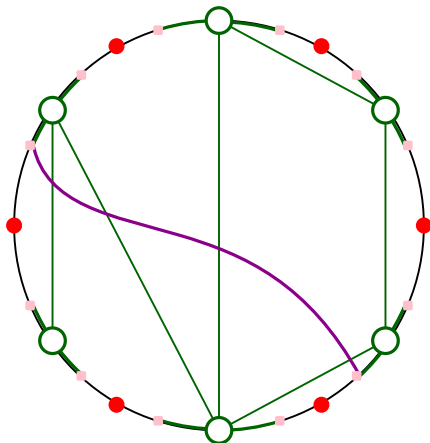
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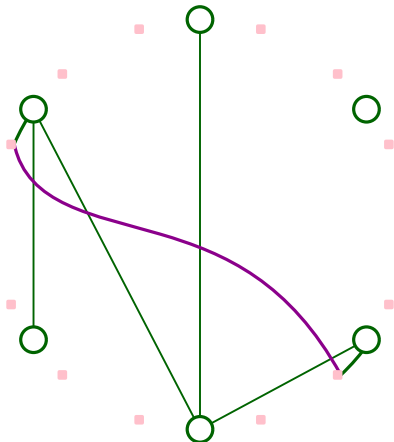
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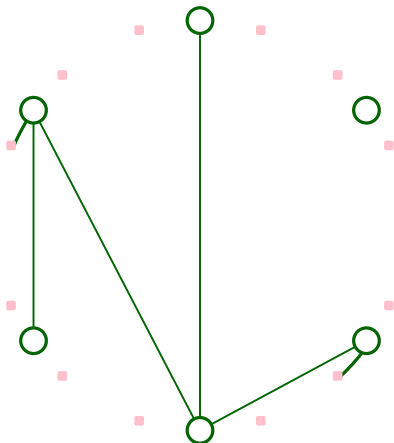
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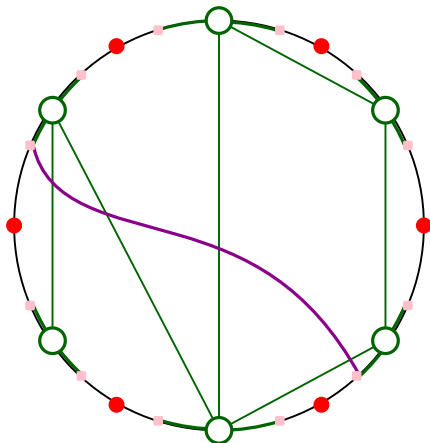
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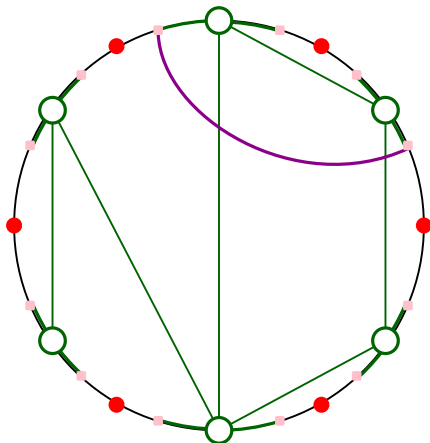
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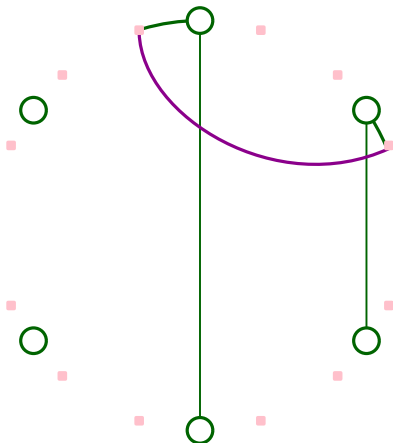
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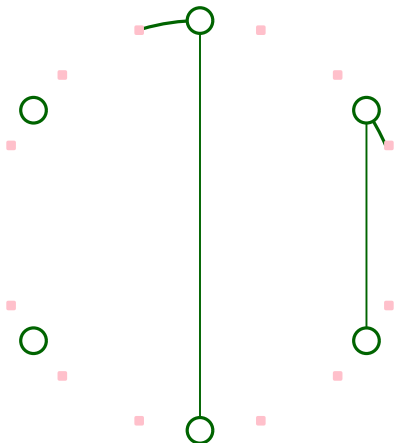
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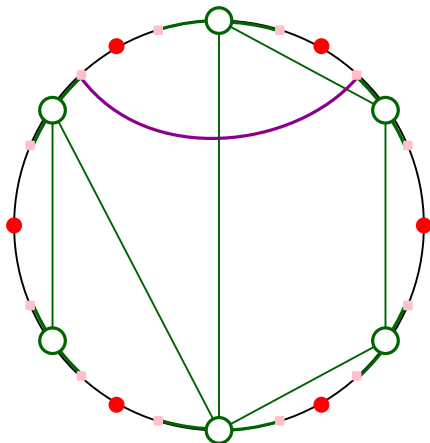
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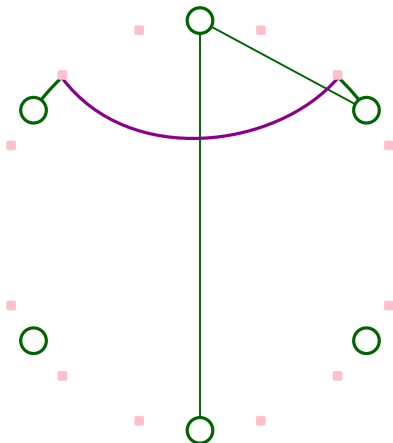
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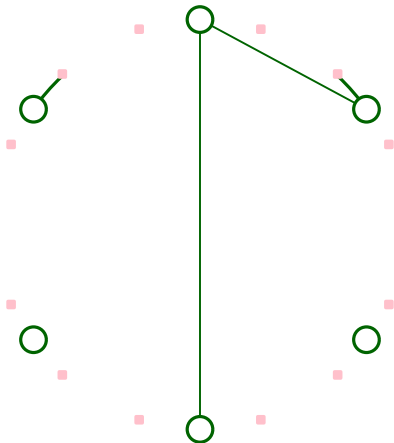
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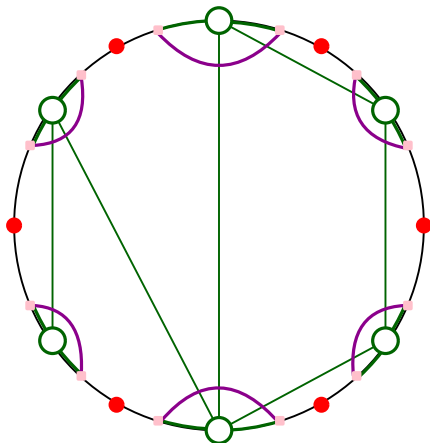
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Accordions

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Définition

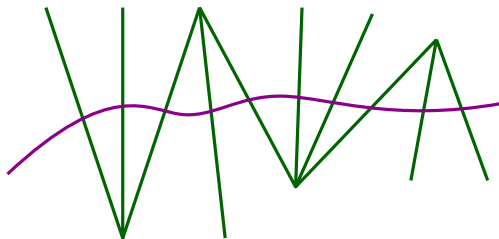
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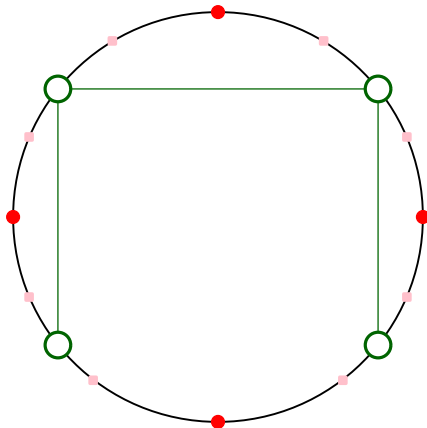
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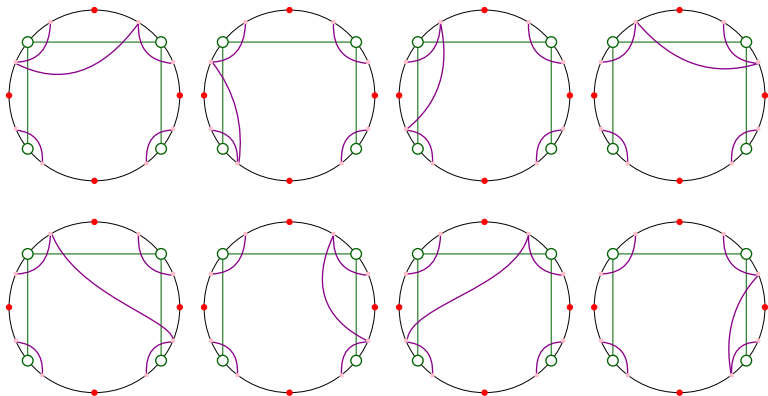
Remarque

Si \mathcal{D} est une triangulation, alors toute diagonale est un accordéon et les \mathcal{D} -dissections maximales sont les triangulations.

Exemple



Exemple



Flip

Théorème (Garver–McConville; Manneville–Pilaud)

Soit \mathcal{D} une dissection.

- 1 Toute \mathcal{D} -dissection maximale \mathcal{T} contient $\text{Card } \mathcal{D}$ accordéons.

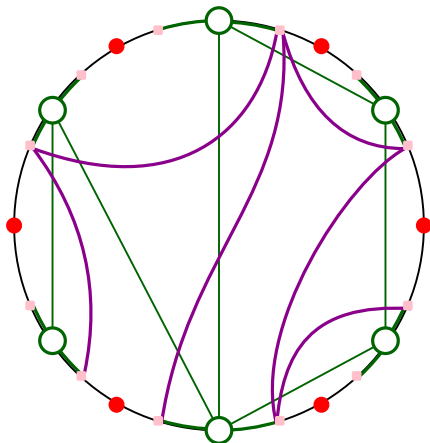
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Théorème (Garver–McConville; Manneville–Pilaud)

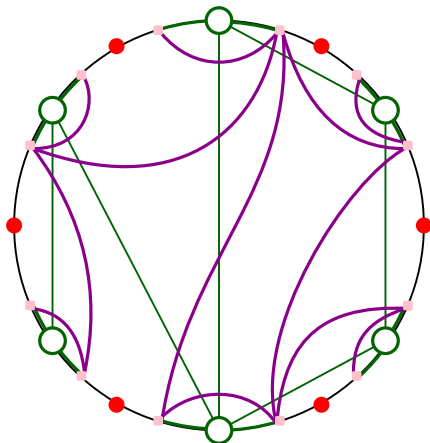
Soit \mathcal{D} une dissection.

- 1 Toute \mathcal{D} -dissection maximale \mathcal{T} contient $\text{Card } \mathcal{D}$ accordéons.
- 2 Si $a \in \mathcal{T}$ est un accordéon pertinent, alors il existe un unique accordéon $b \neq a$ tel que $(\mathcal{T} \setminus \{a\}) \cup \{b\}$ soit une \mathcal{D} -dissection maximale.

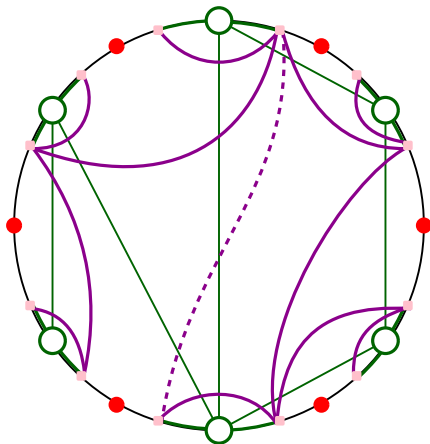
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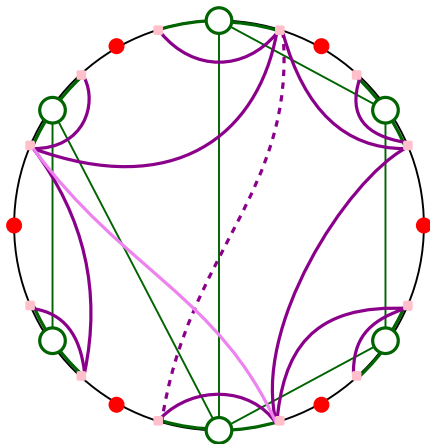
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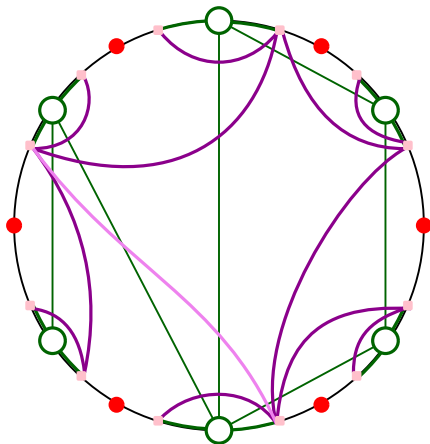
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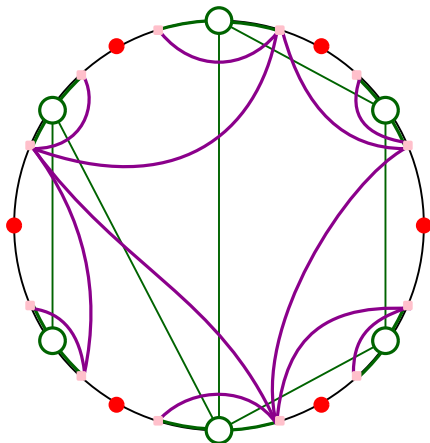
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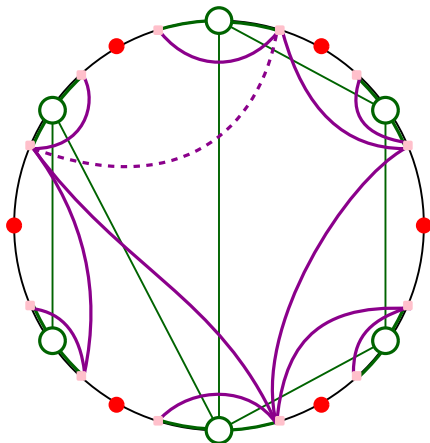
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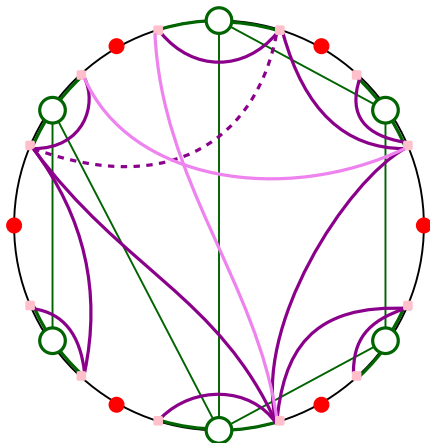
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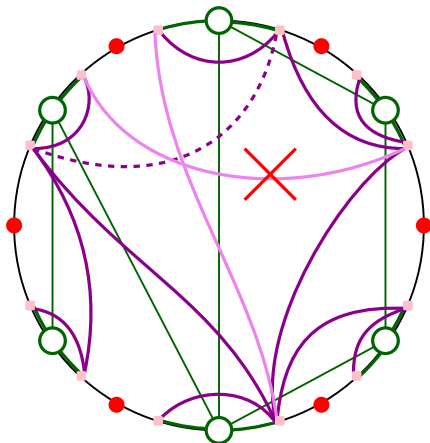
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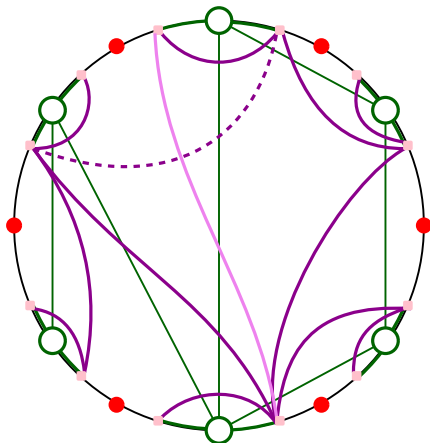
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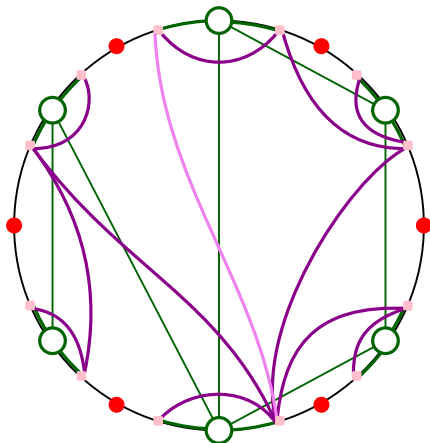
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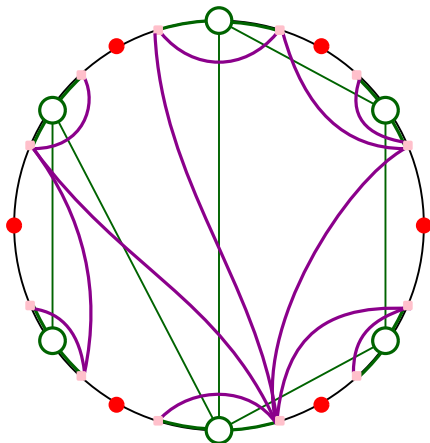
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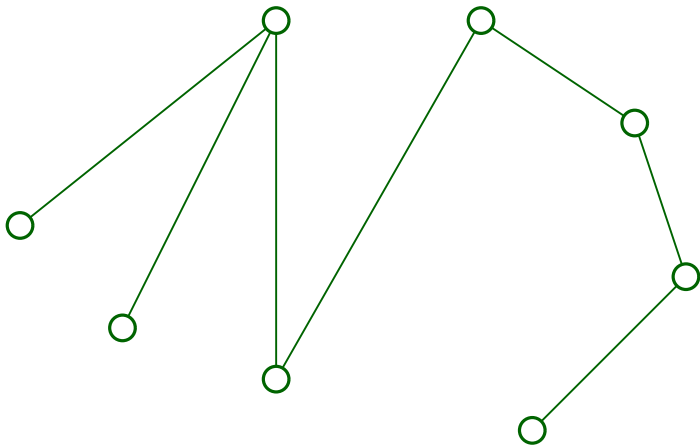


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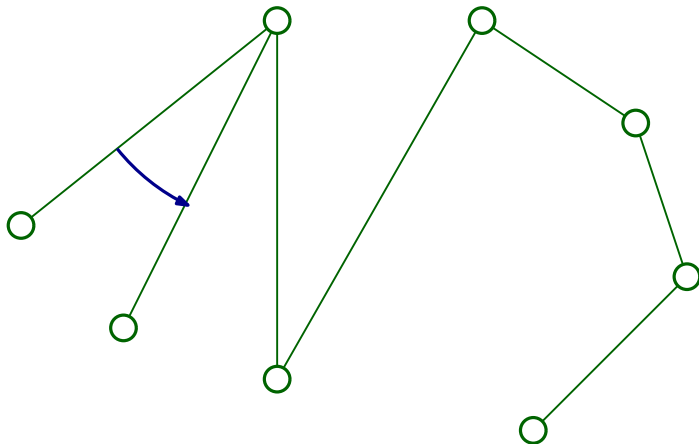
Théorème (P–Pilaud–Plamondon)

Toute cette histoire se généralise aux surfaces à bord avec points marqués (et ponctions).

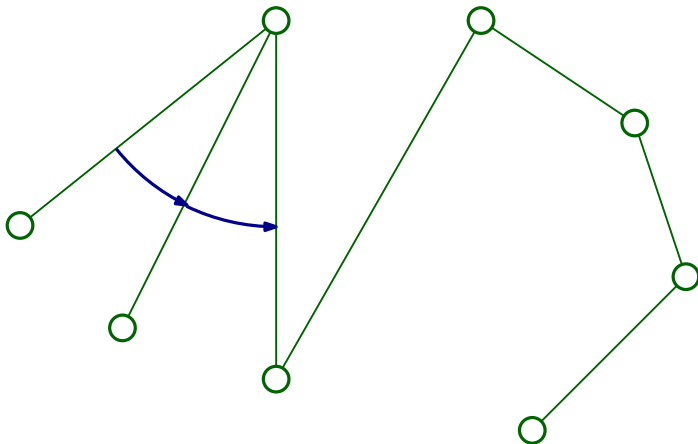
Le carquois d'une dissection



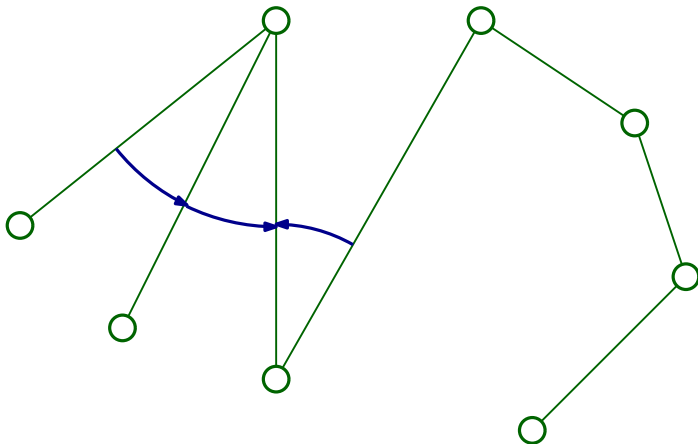
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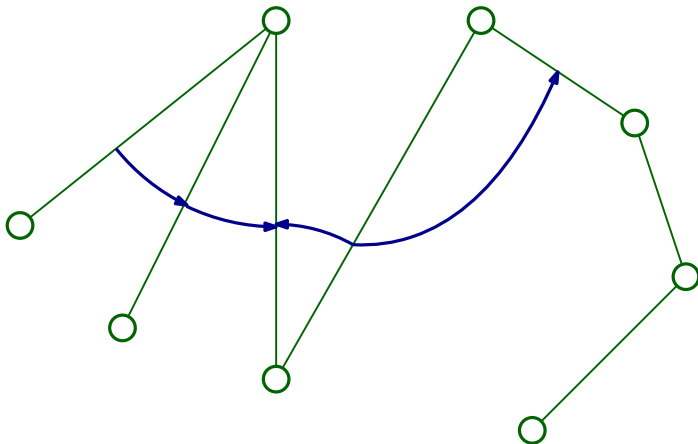
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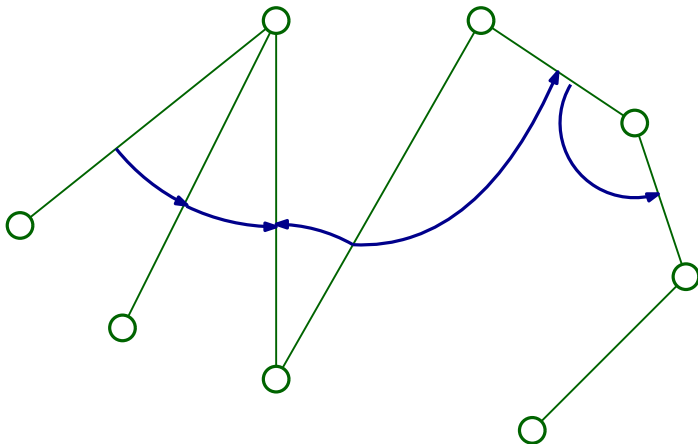
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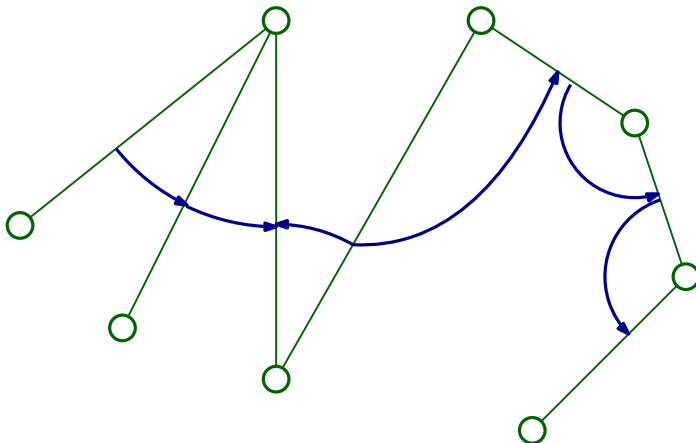
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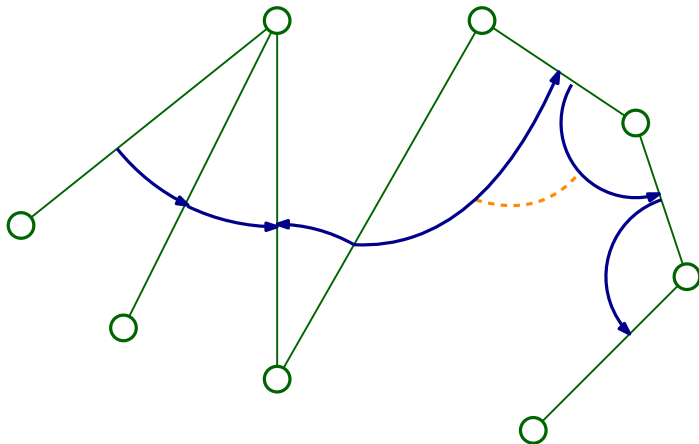
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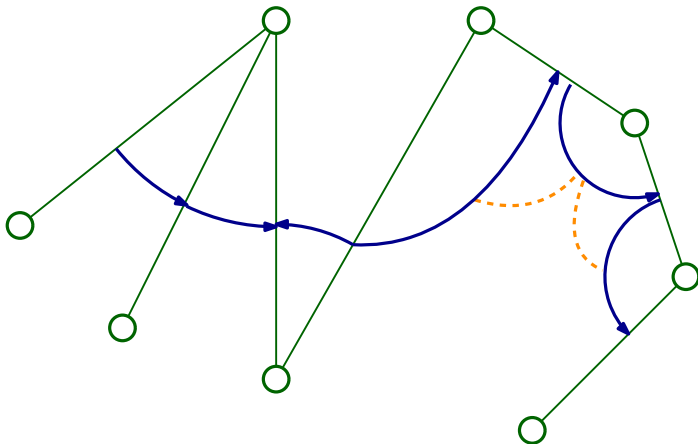
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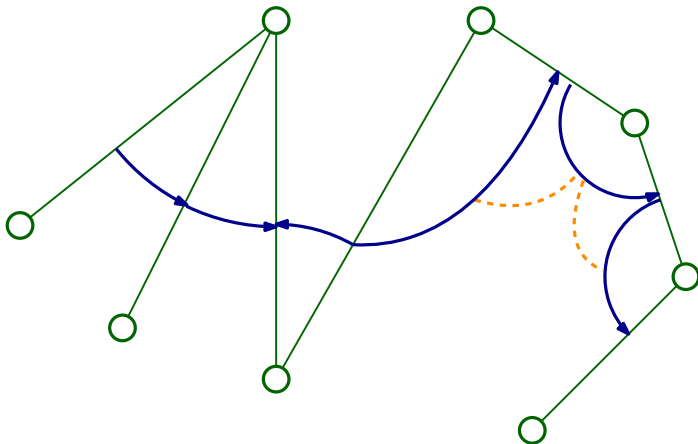
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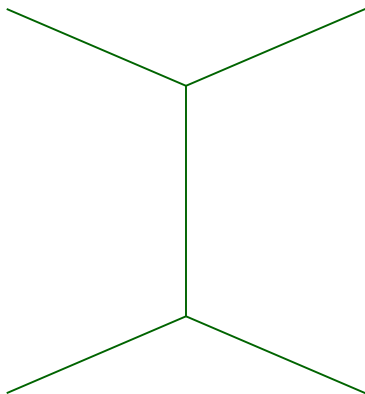
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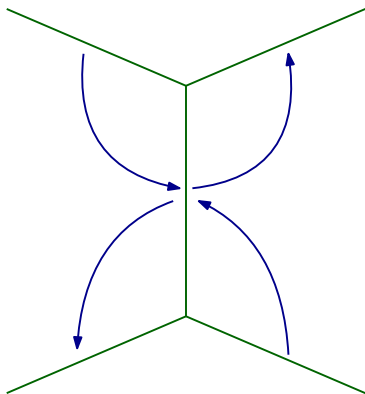
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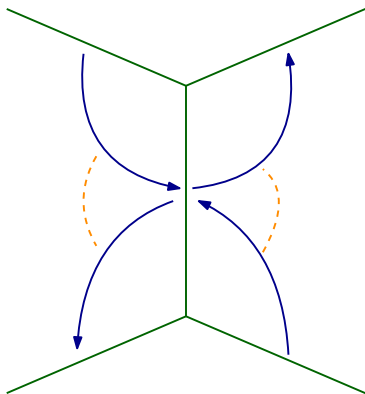
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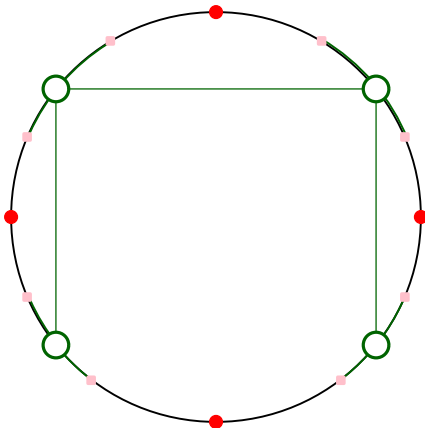


Le carquois d'une dissection

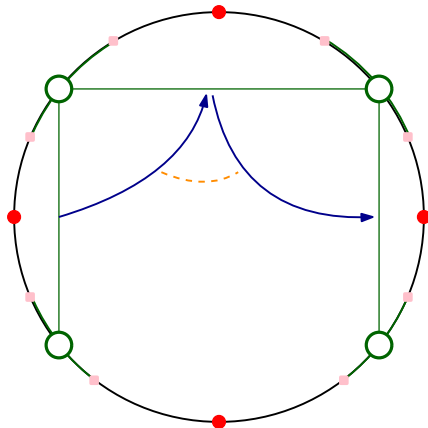
Théorème (Baur–Coehlo–Simões)

Tout carquois à relation aimable provient d'une dissection de surface.

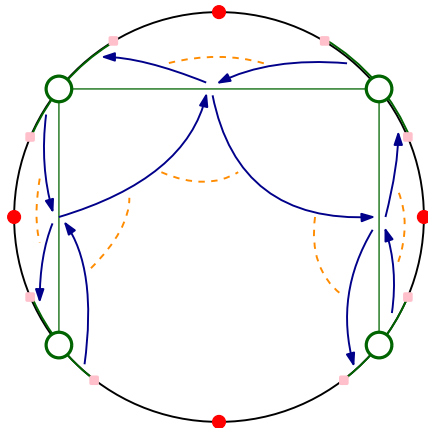
Carquois bourgeonnant



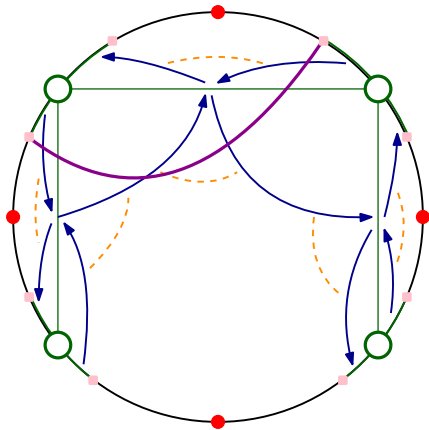
Carquois bourgeonnant



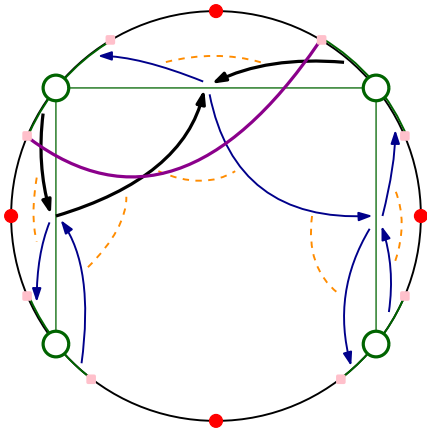
Carquois bourgeonnant



La représentation associée à un accordéon



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Une catégorie d'accordéons

