

不知道大家有没有觉得奇怪

楞次定律

and

勒夏特列原理

这俩

为啥长得这么像呢？

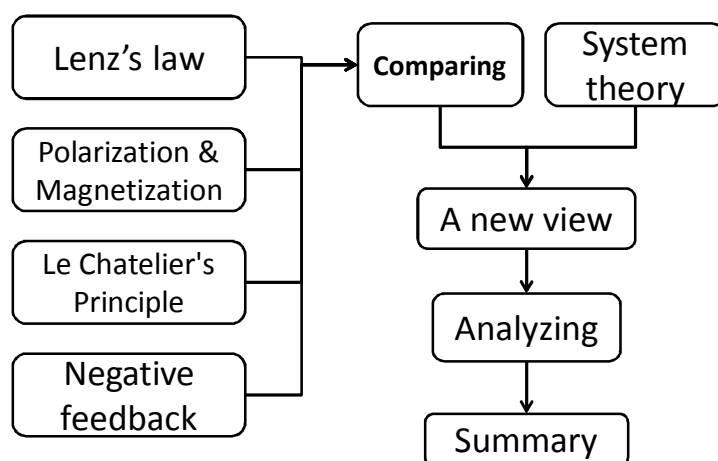
他俩并不孤独.....

# 从楞次定律说起

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OUTLINE

# Lenz's law

Contained  
in the law of  
electromagnetic  
induction

Essence:  
energy  
conservation

Lenz's law's essence is  
energy conservation

Change in  
magnetic flux

Conductor movement  
(cross the magnetic  
induction line)

Generators and  
motors in series

**Only this?**

## Polarization & Magnetization

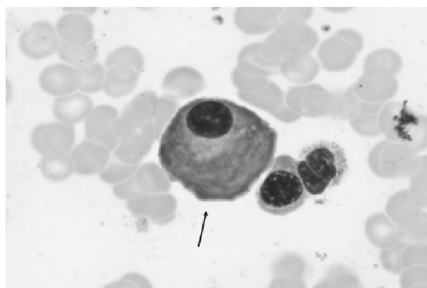
- Polarization :Effects against the reasons?
- Magnetization:  
why Paramagnetic , diamagnetic substance have different effects?

## Le Chatelier's Principle

- systems in stable chemical equilibrium
- submitted to the influence of an exterior force
- a sign contrary to that resulting from the exterior force

## Negative feedback

- The influence on T cell's functions due to Plasma cells



- The regulation of resistance stability in ecosystem

## Comparing 比较

	楞次定律	极化&磁化	勒夏特列原理	生物中的负反馈
外界影响	磁通量变化	出现电场/磁场	温度, 浓度, 催化剂等	草食动物增加
产生作用	产生感应电动势及(可能)感应电流	产生极化电荷或磁荷	平衡移动	植物减少
作用结果	感应电流的磁场阻碍原磁通的变化	介质中电场(磁场)可能加强或减弱	反应向减弱外界影响的方向移动	草食动物没草吃, 数量减少

## Systematology

- What is a **system**?
- **System , Elements , Environment**
- Before this theory : The principle of superposition
- Anything can be regarded as a system!  
so... A new view?

## Maybe...a new view?

object of study

The equilibrium of open systems

Reasons for  
equilibrium's moving

Environment impacts the systems

the mechanism of  
Equilibrium's moving

The principle of system stability

The results of  
equilibrium moving

Change many connections

Why Polarization and Magnetization don't follow this rule?

Two problems:

1. Not a typical open systems
2. Not consider the affects that the systems give to themselves

## Summary

We find nothing new , but have a new view

From another perspective, we may make everything more clear

New perspective is the most important thing though it may be dangerous.

## 参考资料:

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(所引用图片均根据Bing 搜索得到)

# Thank you