

# Algebra, Thermodynamics, and Evolution of the Genetic Code

## Organizers:

**Romeu Cardoso Guimarães**

**Marco V. José**

**Centro Internacional de Ciencias**

**Cuernavaca, Morelos, México**

**October 1-5th, 2012**

## Conference Agenda

### **Monday, October 1st, 2012**

#### **9:45-10:00 Welcome and opening remarks**

**Marco V. José**, Centro Internacional de Ciencias / Instituto de Investigaciones Biomédicas, **Universidad Nacional Autónoma de México** (on behalf of the Organizing Committee)

**Romeu Cardoso Guimarães**, Univ. Federal de Minas Gerais, Brazil

#### **10:00-11:00 Plenary Talk:**

**Romeu Cardoso Guimarães**

**The self-referential model - encoding and error-minimization**

#### **11:00-12:00 Discussion**

**12:00-13:00 Coffee break and office assignments at CIC**

**13:00-14:00 [Miryam Palacios Pérez](#)  
The Proteome Before LUCA  
Universidad Nacional Autónoma de México**

**14:00-16:00 Dinner at UAEM Campus**

**16:00-17:00 Discussion**

**Tuesday, October 2nd, 2012**

**9:00-10:00 Plenary talk**  
**[Savio Torres de Farías](#)**  
Universidad Federal da Paraiba, Brazil  
A new suggested phylogeny of tRNAs based on the construction of ancestral sequences and their implications for origin and evolution of the biologic system

**10:00-11:00 Discussion**

**11:00-12:00 Plenary talk**  
**[Robersy Sánchez](#)**  
Geometrical and Algebraic Signatures of Mutational Events  
Cambridge University, United Kingdom

**12:00-13:00 Coffee break**

**13:00-14:00 [Daniela Sosa](#)**  
A code for the nucleosome  
Universidad Nacional Autónoma de México

**13:00-14:00 Discussion**

**14:00-16:00 Gathering at CIC and Dinner at UAEM Campus**

**16:00-17:00 Discussion**

**Wednesday, October 3rd, 2012**

**9:00-10:00 Plenary Talk**

**Eberto Morgado**

**Algebraic model of the Hotel of Anticodons of the Human tRNAs**

**Universidad Marta Abreu, Las Villas, Cuba**

**10:00-11:00 Discussion**

**11:00-12:00 Coffee break**

**12:00-13:00 Plenary Talk**

**Jaime Lagunez**

**On Laws and Proto-organelles as Protagonists in the Origin of Protein Synthesis**

**Universidad Nacional Autónoma de México**

**13:00-16:00 Gathering at CIC and Dinner at UAEM Campus**

**16:00-17:00 Discussion**

**Thursday, October 4th, 2012**

**9:00-10:00 Plenary talk**

**Marco V José**

**Thermodynamics and Evolution of the Genetic Hotel**

**Universidad Nacional Autónoma de México**

**10:00-11:00 Discussion**

**11:00-12:00 Coffee break**

**12:00-13:00 Víctor Serrano-Solís**

**Decoding virus with Mutual information  
Universidad Nacional Autónoma de México**

**13:00-14:00 Discussion**

**13:00-16:00 Gathering at CIC and Dinner at UAEM Campus**

**16:00-17:00 Discussion**

**Friday, October 5th, 2012**

**10:00-11:00 Coffee break**

**11:00-13:00 ROUND TABLE: SUMMARY AND CONCLUSIONS**

**END**