http://wigner.mta.hu/node/855

The Zimányi Medal

The Zimányi Medal was founded in 2011 by the predecessor of Wigner Research Centre for Physics, the KFKI Research Institute for Particle and Nuclear Physics in memory of Professor József Zimányi (1931-2006), member of the Hungarian Academy of Sciences, an internationally recognized nuclear theorist. The medal commemorates his scientific legacy in theoretical nuclear physics, where he was a leader in the field of high energy nuclear theory and in the search for the quark-gluon plasma.

Hungarian Science Academician Professor Jozsef Zimanyi 1931-2006

Gergely

József

Magdolna

Zimányi Family ~QM2005

The „Zimányi Medal ” was created by the Hungarian sculptor Imre Varga

The Zimányi Medal in Nuclear Theory is granted to a young theoretical physicist under 40, who made extraordinary contributions to the field of high energy nuclear physics. The candidates must have a well documented record of accomplishment through published papers and international recognition to be nominated. The nomination and selection is made by 16 members of an international committee approved by the József Zimányi Physics Foundation.

The Foundation provides the winner with a cash prize together with a bronze Medal and a certificate with citation.

Biro, Tamas, Chair of Zimanyi Foundation Executive Committee

2015 Zimanyi Award Selection Committee:

Levai, Peter (secr.)
Eskola, Kari
Harris, John
Heinz, Ulrich
McLerran,Larry
Redlich, Krzysztof
Schukraft, Jurgen
Stöcker, Horst
Csörgő, Tamás
Gyulassy, Miklós (chair)
Hatsuda, Tetsuo
Kodama, Takeshi
Müller, Berndt
Rischke, Dirk
Jacak, Barbara
Wang, Xin-Nian

Zimanyi Nuclear Theory Medal criteria

Theorist in field of High Energy Heavy Ion Physics

With outstanding accomplishments and future promise
in area of A+A phenomenology related to the
prediction and interpretation of experimental observables

Age < 40

The 2015 Selection Committee proposed 19 outstanding candidates
from around the world working on a wide range of topics including

Hydrodynamics, Transport theory, AdS/CFT, Lattice QCD,
Jet quenching, Color Glass Condensates, Quark recombination, …

In 2011 Tetsufumi Hirano , 3+1D Hydrodynamics

In 2012 Peter Petreczky , Lattice QCD Equation of State and QQ Po

In 2014 Thoumas Lappi , Color Glass Condensate/Glasma

In 2015 Chihiro Sasaki , Field Theoretic Models of QCD phase structure

Previous Zimanyi Medal Awards

QM 2011

QM2012

QM 2014

2011		**Tetsufumi Hirano** (Sophia University Tokyo) For his outstanding contributions to heavy ion phenomenology through his extensive work on relativistic hydrodynamics applied to the understanding of elliptic and radial flow as well as jet-medium observables, and on quantifying the interplay between initial state effects, full three dimensional ideal fluid expansion, and the role of final state nonequilibrium decoupling dynamics.
2012		**Péter Petreczky** (Brookhaven National Laboratory) For his seminal studies in theoretical nuclear physics applying lattice QCD techniques to compute the equation of state of quark gluon plasmas and the temperature dependence of heavy quark potential and quark susceptibilities which have had strong impact on heavy ion phenomenology at the SPS, RHIC and LHC energies.
2014		**Tuomas Lappi** (University of Jyväskylä, Finland) For his pioneering independent and collaborative work on Color Glass Condensate and the Glasma models of initial conditions in high energy A+A reactions that provide theoretical foundations on which many current bulk viscous hydrodynamic and jet quenching opacity calculations depend.

Curriculum Vitae

Name: **Chihiro Sasaki**

Nationality: Japanese

Date of Birth: April 5, 1977

Education:

2002 Master Degree, Nagoya University

2005 PhD, Nagoya University

Supervisor Masayasu Harada

Employments:

2003-2005 Research Assistant, Nagoya University

2005-2007 Postdoc at GSI, Darmstadt

2007-2009 Postdoc of excellence at TU Munchen

2009-2015 Junior Fellow , FIAS

2015- Professor at Wroclaw University,

Awards:

2008 Young Scientist Award, **commemorating Professor Zeev Fraenkel,** at 18th Particle and Nuclei (PANIC08), Eilat Israel

2015 Jozsef Zimanyi Nuclear Theory Award, Quark Matter 2015, Kobe, Japan

Publications: *94 articles, **54** in referee Journals, **22** Conference, **1** Review*

Citations: **1571** citations with **h=22**, from HEP-SPIRES

Research: Hadron Physics, Quantum Field Theory and Chiral Dynamics, Heavy Ion Phenomenology

Chihiro Sasaki's recent 2015 work on InspireHep.net

Polyakov loop fluctuations and deconfinement in the limit of heavy quarks.
Pok Man Lo, Krzysztof Redlich, and **Chihiro Sasaki**
Phys.Part.Nucl. 46 (2015) 5, 756-759

Matching Hagedorn mass spectrum with Lattice QCD.
Pok Man Lo, Michał Marczenko, Krzysztof Redlich, and **Chihiro Sasaki**
[arXiv:1507.06398 [nucl-th]]

Strangeness fluctuations from K-pi interactions.
Bengt Friman, Pok Man Lo, Michał Marczenko, Krzysztof Redlich, and **Chihiro Sasaki**
[arXiv:1507.04183 [hep-ph]] Phys.Lett. B in press

Thermodynamics with Unbroken Center Symmetry in Two-Flavor QCD.
S. Takemoto, M. Harada, and **C. Sasaki**
10.1142/9789814329521_0055

Polyakov loop fluctuations in Dirac eigenmode expansion.
Takahiro M. Doi, Krzysztof Redlich, **Chihiro Sasaki**, and Hideo Suganuma
[arXiv:1505.05752 [hep-lat]]

Chiral Thermodynamics with Charm.
Chihiro Sasaki
[arXiv:1502.07911 [hep-ph]]

Effective model for the QCD phase transitions at finite baryon density.
Sanjin Benic, Igor Mishustin, and **Chihiro Sasaki**
Phys.Rev. D91 (2015) 12, 125034

Correlations between light and heavy flavors near the chiral crossover.
Chihiro Sasaki, and Krzysztof Redlich
Phys.Rev. D91 (2015) 7, 074021

Publication cited over 200

Susceptibilities and the phase structure of a chiral model with Polyakov loops

C. Sasaki, B. Friman, and K. Redlich

PRD75, 074013 (2007)

In an extension of the Nambu–Jona-Lasinio model where the quarks interact with the temporal gluon field, represented by the Polyakov loop, we explore the relation between the deconfinement and chiral phase transitions. The effect of Polyakov loop dynamics on thermodynamic quantities, on the phase structure at finite temperature and baryon density and on various susceptibilities is presented. Particular emphasis is put on the behavior and properties of the fluctuations of the (approximate) order parameters and their dependence on temperature and net-quark number density. We also discuss how the phase structure of the model is influenced by the coupling of the quarks to the Polyakov loop.

Nucl.Phys. A837 (2010) 65-86

Publication cited over 100

Hadron production in ultra-relativistic nuclear collisions: Quarkyonic matter and a triple point in the phase diagram of QCD

A. Andronic [a,*], D. Blaschke [b,c], P. Braun-Munzinger [a,d,e,f], J. Cleymans [g], K. Fukushima [h], L.D. McLerran [i,j], H. Oeschler [e], R.D. Pisarski [i], K. Redlich [a,b,k], C. Sasaki [f,l], H. Satz [k], J. Stachel [m]

Abstract

We argue that features of hadron production in relativistic nuclear collisions, mainly at CERN-SPS energies, may be explained by the existence of three forms of matter: Hadronic Matter, Quarkyonic Matter, and a Quark–Gluon Plasma. We suggest that these meet at a triple point in the QCD phase diagram. Some of the features explained, both qualitatively and semi-quantitatively, include the curve for the decoupling of chemical equilibrium, along with the non-monotonic behavior of strange particle multiplicity ratios at center of mass energies near 10 GeV. If the transition(s) between the three phases are merely crossover(s), the triple point is only approximate.

Keywords

Dense quark matter; Chiral symmetry breaking; Large N_c expansion

The 2015
Zimányi Medal on Nuclear Theory

awarded to

Chihiro Sasaki

and presented

on October 3-rd, 2015
at the Quark Matter 2015 Conference
Kobe, Japan

For her outstanding original contributions to theoretical undersdtanding of chiral dynamics and phase structure of hot and dense, strongly interacting matter under experimental study using high energy nuclear collisions.

Prof. Tamás Sándor Bíró
Chair of Zimányi Physics Foundation

Prof. Miklós Gyulassy
Chair of the Selection Committee

WIGNER

Wigner Research Centre for Physics of the Hungarian Academy of Sciences

QM2015 Zimanyi Award winner , **Chihiro Sasaki** PhD 2005, Wroclaw U. & Goethe FIAS

For her outstanding original contributions to theoretical understanding of chiral dynamics and phase structure of hot and dense, strongly interacting matter under experimental study using high energy nuclear collisions

Two thousand dollars

$ 2000

For Chihiro Sasaki

Who is the Winner of Zimányi Medal 2015

This year's Zimanyi Medal Winner Chihiro Sasaki was also honored in a special Shinto ceremony in Kobe Japan 10/1/15

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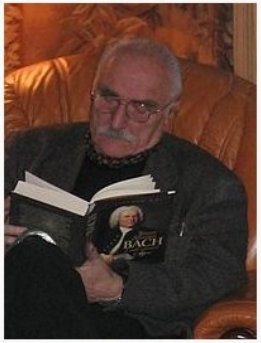
“Alapito” (Founding Father) 1971 Tihany HU

Varga Imre



magyar szobrászművész

Született Siófok
1923. november 1. (87 éves)