

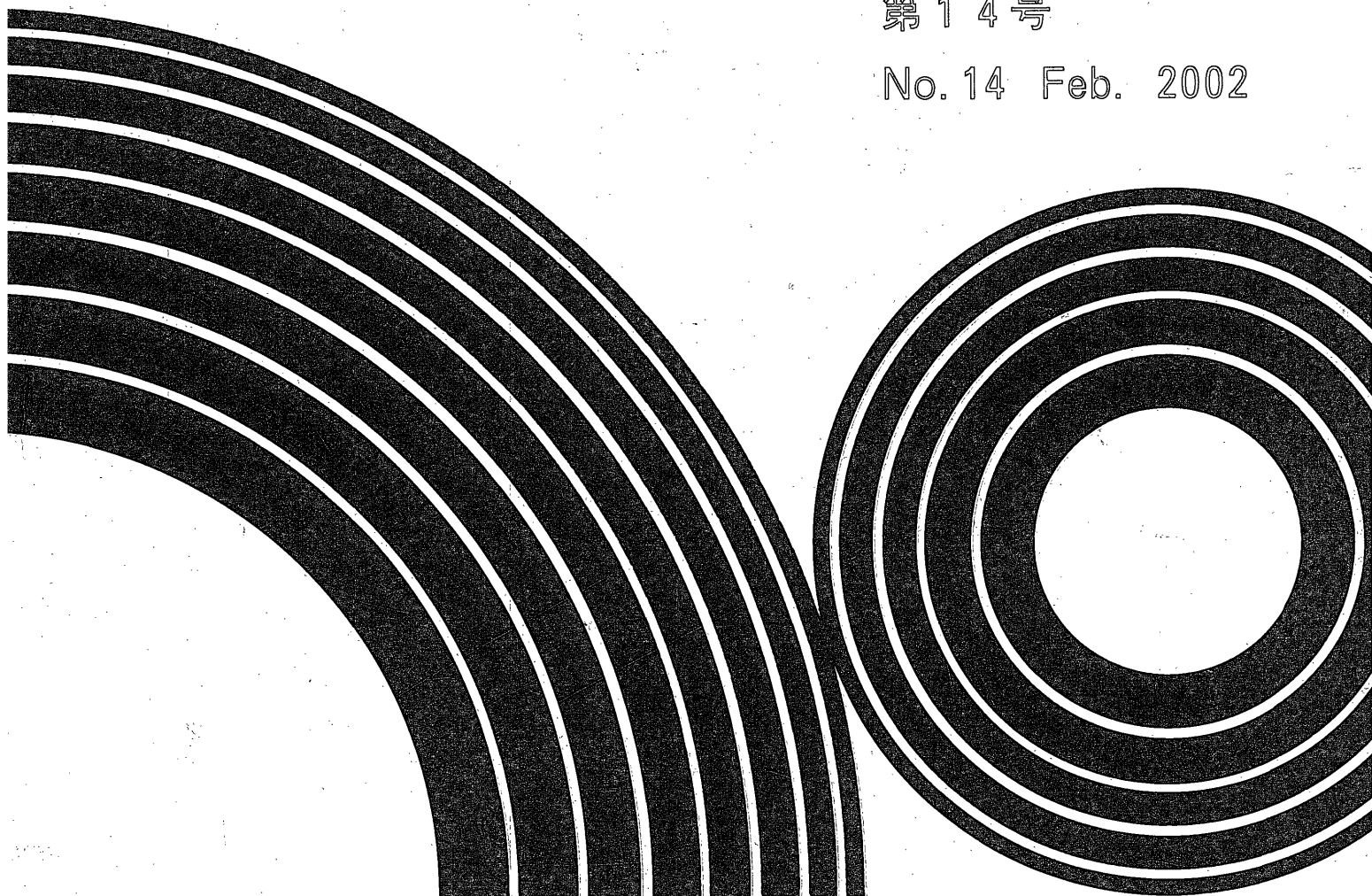
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Talkes

given at

RIST Colloquim

We
understand
that the diversity
of the content should be
the energy to construct should cul-
tural message tomorrow. RIST is thank-
ful to guest speakers for their talkes.

- No.264** March 12, 2001
Review of Job Tenure in 39 Years
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**Aerosol Optical Characterization and Radiative Forcing
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Linear Relational Expression on Multiple Zeta Values
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- No.272** November 28, 2001
Latest Results from Subaru Telescope
Masanori Iye
National astronomical observatory of Japan

理工学総合研究所の主な研究内容
(Research Projects in RIST)

Project (1)

研究課題：太陽活動の地球環境への影響

Research Subject：Effects of the solar activity on the global environment

概要：太陽の活動（黒点数）と地球の気象学上の統計量を多次元空間に埋め込んで力学系を構成し、太陽活動の地球環境への影響を新しい複雑系解析法を用いて調べる。

Outline： Dynamical systems are constructed by embedding the solar activity (numbers of the sun spot) and the observed quantities concerning the global environment in the multi-dimensional space. And the effects of the solar activity on the global environment are studied by the use of the new method for analyzing complex systems.

研究者： 湯浅 学、木口勝義、保本正芳、向井苑生（理工学部）、佐野 到
（理工学部）

Staffs: Manabu YUASA, Masayoshi KIGUCHI, Masayoshi YASUMOTO,
Sonoyo MUKAI (Faculty of Science and Technology), Itaru SANO
(Faculty of Science and Technology)

Project (2)

研究課題：複雑系としての人の移動

Research Subject： Migration as a complex system

概要：人の移動とそれに関係する様々な統計量を多次元空間に埋め込んで力学系を構成し、その系を動かしているドライビングフォースを、新しい複雑系解析法を用いて誤差評価を伴った形で抽出する。

Outline: Dynamical systems concerning the migration are constructed by embedding the number of migration and other related statistical quantities of the social science in the multi-dimensional space. Then, with the estimation of errors, the driving force of the system is extracted by the use of the new method for analyzing complex systems.

研究者： 湯浅 学、川東龍夫、長田 朗 (理工学部)、大西威人 (商経学部)

Staffs: Manabu YUASA, Tatsuo KAWAHIGASHI, Akira NAGATA (Faculty of Science and Technology), Takehito ONISHI (Faculty of Business and Economics)

Project (3)

環境と物質科学 (Environment and Material science)

研究課題 (1) : 水圏・気圏における化学物質の動態に関する研究

Research Subject (1) : The study of the chemical substance on movement in Hydrosphere and atmospheric region

概要 : 我々のエネルギー源である化石燃料の燃焼に伴って生じる硫黄, 炭素, 窒素の各酸化物により酸性雨, 温暖化および光化学スモックなどが形成され, またフロンによるオゾン層破壊にも見られるようにグローバルな環境汚染として極めて深刻な社会問題となっている。従って, 本研究コースでは水圏および気圏におけるこのような環境負荷物質の動態についての研究を行なっている。

Outline : Each oxide of nitrogen, carbon, sulfur by the burn of the fossil fuel which is our energy source are made to be causing, acid rain, warming, photochemistry smoke are formed, and these become a very serious social problem as global environmental pollution also observed for ozone layer depletion by the flon. Therefore, the research of such environmental loading material on the movement in hydrosphere and atmospheric region is carried out in this study course.

研究者 : 藤野 治、川東龍夫、合田四郎 (理工学部)、竹原幸生(理工学部)

Staffs: Osamu FUJINO, Tatsuo KAWAHIGASHI, Shiro GOHDA (Faculty of Science and Technology), Kosei TAKEHARA (Faculty of Science and Technology)

研究課題（２）：機能性金属錯体集積体の構築、構造および物性研究

Research Subject (2) : Studies of constructions, structures and functions on assembled metal complexes

概要：金属イオンと有機配位子により構築される新規な金属錯体集積体を合成し、その構造および性質を明らかにする。特にこのような化合物は優れたガス吸着能、触媒機能、磁性体などを発現することが期待される。

Outline : We attempt to synthesize novel assembled metal complexes constructed by various metal ions and organic ligands, and investigate their crystal structures and functions. Thus coordination polymers are expected to produce excellent gas absorption ability, catalytic activity and magnetic materials, etc.

研究者：前川雅彦、末永勇作（理工学部）

Staffs : Masahiko MAEKAWA, Yusaku SUENAGA (Faculty of Science and Technology)

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