پژوهشکدهٔ ریاضیات ─────── پژوهشگاه دانشهای بنیادی

سمینار هفتگی جبر جابه‌جایی
(بهار ۱۳۹۱)

Last results on Fermat's Theorem ۹۱/۱/۲۴

علی رجایی،
دانشگاه تربیت مدرس

──────── Abstract ────────

In this talk we first present a brief over-all sketch of Wiles' proof of Fermat's last theorem and discuss more recent developments related to modularity lifting theorems, Shimura-Taniyama type questions and Serre's conjecture. The depth and breadth of the topics discussed will depend on feedback from audience!

Dimensions of higher secant varieties of Projective Varieties(I) ۹۱/۲/۲۱

(ساعت ۱۷ الی ۱۹)   طاهره آلادپوش،
پژوهشگاه دانشهای بنیادی

──────── Abstract ────────

The goal of these lectures is to study the dimensions of higher secant varieties of projective varieties, and to deal with the classification of defective varieties. We first introduce basic definitions and theorems on higher secant varieties and their dimensions.Then we concentrate on the problem of determining the Segre varieties with degenerate higher secant varieties, and show this problem is connected with many others in several branches of mathematics.

Dimensions of higher secant varieties of projective varieties(II) ۹۱/۲/۲۸

طاهره آلادپوش،
پژوهشگاه دانشهای بنیادی

Infinite loop spaces and their homology: An introduction to algebraists ۹۱/۳/۱۱

هادی زارع،
دانشگاه تهران

──────── Abstract ────────

The category of spectra is one the most important ones to topologists. In parallel to the category of spectra, we have the category of infinite loop spaces. We describe the machineries that describe these spaces. The homology of these spaces is known to be a Hopf algebra. Finally, we comment on the notion of Hopf rings, which is used to describe homology of a collection of loop spaces.

The depth formula for modules of finite Gorenstein dimension and reducible complexity ۹۱/۳/۱۸

آرش صادقی،
دانشگاه خوارزمی و پژوهشگاه دانشهای بنیادی

──────── Abstract ────────

Let R be a local ring and let M and N be two R-modules. We prove that if one of these modules has reducible complexity and finite Gorenstein dimension then the depth formula holds, provided $Tor_R^i(M,N) = 0$ for $i >> 0$. We also study the vanishing of cohomology of a module of finite complete intersection dimension.

Tropical vertex group and Quiver representations ۹۱/۳/۲۵

ایمان ستایش،
پژوهشگاه دانشهای بنیادی

──────── Abstract ────────

I will talk about the tropical vertex group (formal families of symplectomorphisms of the 2-dimensional algebraic torus), and its relations to the moduli spaces of quiver representations and the Gromov-Witten theory of toric surfaces. It will be an expository talk and no background knowledge on the subject will be necessary.

زمان: پنج شنبه ها ساعت ۱۰ الی ۱۲(بجز سمینار۹۱/۲/۲۱)
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