Lecture 25

Continuation of Lecture 24.

Lecture 26

Homotopy groups. Definition.
Fibre bundles (definition)
(locally trivial f. b.).

Lecture 27

Serre bundles. Covering homotopy property.
Strong covering homotopy algorithm.
(SCHA)
Important examples: Serre fibrations - mappings of interval - and smooth fibrations with „horisontal" family of planes. Holonomy groups. Paths „parallel to the base". Locally flat case.

Lecture 28

Continuation of Lecture 27
Principal bundles. Examples.. Discrete groups. Hopf bundle. Universal covering.. Lens spaces. Cell decomposition. Action of fundamental group on the homotopy groups.
Exact sequences of homotopy groups.

Lecture 29

Continuation of lecture 28