Elliptic Curves and Modular Forms Converge South of the Taklamakan

Emily Grosholz

For Wen-Ching (Winnie) Li

A skein of silk amid the iron and bronze weapons,
The trade routes brought my number theory teacher,
Dr. Li,

Who writes faster with white chalk on the blackboard
Than any human being I ever followed across a proof,
Raising clouds of chalk dust at the furrowed extremities
Of each long expedition towards a theorem. Camels
Cough and huddle by the caravanserai, in moonlight.

I carry coughdrops with me in my bookbag,
under notes,

So I won't interrupt her train of thought by sneezing,
And try to copy every line she writes, as well as those
Brief detours on heuristics, or her mild evaluations
Of depth or usefulness or interest of conjectures, placed
Unexpectedly like waterfalls down clefts in limestone,
Or her infrequent, offhand explanations of the way
She generalized a printed remark of Serre's,
from gamma-
Zero- p (p prime, indexing groups of matrices) to
any level.

How algebraic form can complement the
smooth analysis

That frames the proof, the complex upper half-plane
poised

Like some great violet dome on whose connected face
The primes come out, appearing one by one in
constellations

Above the Taklamakan Desert where the Silk Route ran
From Xian, between the winding Yellow River and
the great

But perished Wall, to break against the lovely gates
of Kashgar.

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